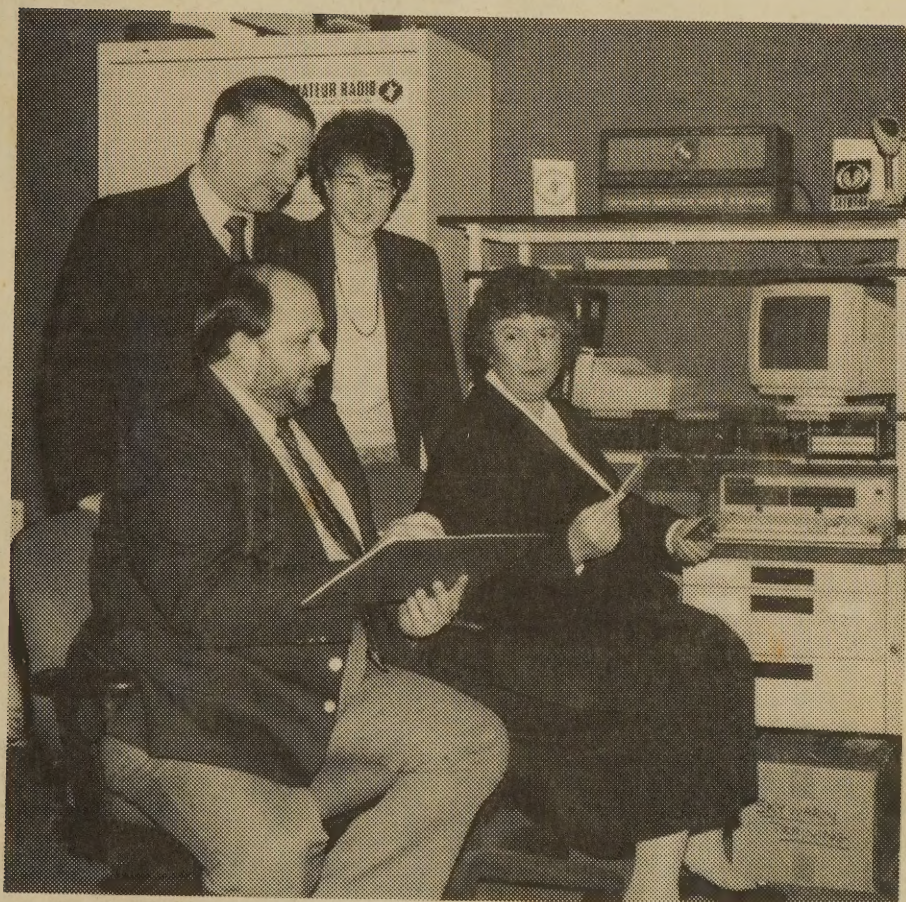




MAY 1992



SKYARN Amateur Radio Station At the National Weather Service

See story on page 17



FCC Highlights ◉ ARRL Report ◉ VE Exam Schedule ◉ Public Service Report
DX Column ◉ Feature Articles ◉ Club Reports ◉ Want Ads ◉ Much More

Be a Know It All; Read Auto-Call

Auto-Call is the Official Journal of the Foundation For Amateur Radio

\$1.00

MARYLAND RADIO CENTER

Authorized dealer for :

Kenwood, Icom, TenTec, AEA, Kantronics,
 Spi-ro, Barker/Williamson, Alpha Delta,
 MFJ, ARRL Books, Callbook, Sams books,
 Mirage/KLM, Benchner, Cushcraft, Hustler,
 Lakeview, SMC mounts, the Pouch, Diamond,
 Amidon, Butternut, Cable Factory, Larsen,
 Nye, Vanco, VanGorden, Vibroplex, DRSL,
 Covercraft, Antenna Specialists, Daiwa,
 Astron

Nationwide Order Line

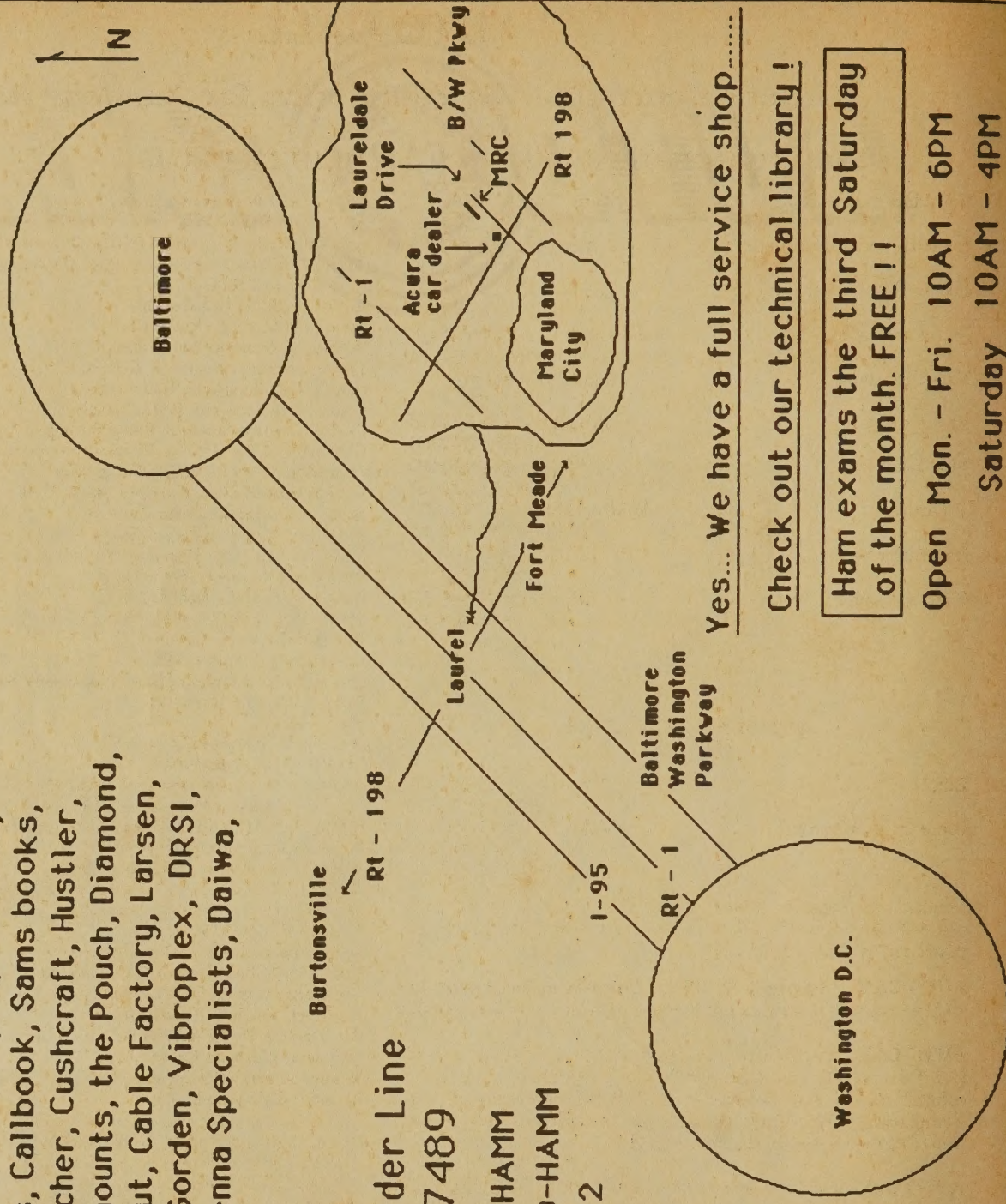
1-800-447-7489

Baltimore - 880-HAMM

Washington - 470-HAMM

Laurel - 725-1212

FAX - 725-1198



Yes... We have a full service shop.....

Check out our technical library!

Ham exams the third Saturday
 of the month. FREE !!

Open Mon. - Fri. 10AM - 6PM

Saturday 10AM - 4PM

AUTO-CALL

Official Journal of the Foundation for Amateur Radio

FOUNDATION OFFICERS

Foundation President	Tony Young, WA3YLO (301) 262-1917
Executive Vice President	Mary Morris, N4TCI (703) 971-3905
Admin. Vice President	Henry Miller, W3BWN (301) 474-7376
Vice President	Robert Armstrong, WA4SQL (703) 751-2294
Vice President	Hugh Turnbull, W3ABC (301) 927-1797
Vice President	John Chitwood, K3RGB (301) 799-7360
Vice President	Phil Russo, N3GDD (301) 552-2065
Treasurer	Mildred Mumford, N3KCQ (301) 577-6659
Recording Secretary	Joe Seasey, KA3UZI (301) 725-5822
Corresponding Secretary	Ethel Smith, K4LMB (703) 536-8469

AUTO-CALL MAGAZINE STAFF

Editor	Ethel Smith, K4LMB (703) 536-8469
Circulation Manager	John Swafford, W4HU (703) 536-9537

Deadline for copy is the 5th of the month. All contributions are welcomed, but the editor does reserve the right to edit or reject any portion of any copy.

AUTO-CALL Copyright © 1992. Permission is granted by FAR to reprint from this publication provided credit is given.

AUTO-CALL is published monthly as the official journal of the Foundation for Amateur Radio. Comments made by columnists do not necessarily reflect the opinions of the Foundation. No effort is made to investigate advertisers, therefore no warranty can be implied.

AUTO-CALL has paid subscriptions of over 1600 and a total circulation of about 2000. Copies are sold at local stores and a number of Complimentary and Swap copies are mailed each month. The magazine is entered as third class non-profit matter at the post office at Arlington, VA.

Subscription rate is \$8 a year.

Subscriptions received after the 15th of the month will be started with the following month's issue.

AUTO-CALL MAGAZINE
P.O. BOX 7612
FALLS CHURCH, VA 22040-1452

MEMBER CLUBS

Adams County Amateur Radio Society
Alexandria Radio Club
Amateur Radio Research and Development Corp.
AMSAT - Radio Amateur Satellite Corporation
Anne Arundel Radio Club
Antietam Radio Association, Inc.
Arlington Amateur Radio Club
Baltimore Amateur Radio Club
Baltimore Radio Amateur Television Society
Capital City Amateur Radio Society
Capitol Hill Amateur Radio Society
Carroll County Amateur Radio Society
Chaverim of the Greater Washington Area, Inc.
Columbia Amateur Radio Association
Department of State Amateur Radio Club
Fauquier Amateur Radio Club
Frederick Amateur Radio Club
Frederick Amateur Repeater Group
Friendship Amateur Radio Club
Goddard Amateur Radio Club
Green Mountain Repeater Association
Herndon Repeater Group
IBM Amateur Radio Club
Johns Hopkins University APL Amateur Radio Club
Laurel Amateur Radio Club
MADRAS
Maryland Emergency Phone Net
Maryland FM Association
Maryland Mobileers Amateur Radio Club
Mercury Amateur Radio Assn., NE Area
Metropolitan Communications Network Radio Club
Metrovision Amateur TV Club
Montgomery Amateur Radio Club
Montgomery Auxiliary Communications Service
Mount Vernon Amateur Radio Club
National Capital DX Association
Naval Research Laboratory Radio Club
New Carrollton Amateur Radio Society
Northern Virginia FM Association
Northern Virginia Radio Club
Ole Virginia Hams Amateur Radio Club
Pentagon Amateur Radio Club
Potomac Area VHF Society
Potomac Valley Radio Club
Prince George's Wireless Association, Inc.
Prince George's County ARES/RACES
Quarter Century Wireless Association, Inc.
 Baltimore Chapter #20
 Shenandoah Valley Chapter #137
 Vic Clark Chapter #91
 Washington Chapter #23
Rock Creek Amateur Radio Association
St. Mary's County Amateur Radio Association
Shenandoah Valley Amateur Radio Club
Southern Maryland Amateur Radio Club
Southern Patuxent Amateur Radio Club
Stafford Amateur Radio Assn
Sterling Park Amateur Radio Club
Tri-County Amateur Radio Club
T-MARC, The Middle Atlantic FM & Repeater Council
Vienna Wireless Society
Washington Adventist Amateur Radio Association
Washington Area Young Ladies' Amateur Radio Club
Woodbridge Wireless, Inc.

EDITORIAL

Tony Young - WA3YLO

President, Foundation for Amateur Radio

Greetings from the 1992 officers of the Foundation For Amateur Radio! Take a moment to look at the masthead of this issue of *Auto-Call*. You will find there are some new names, along with those of many loyal and long-term trustees who continue to serve YOUR club and YOUR Foundation. Over the next several months, we hope to highlight these people individually so you can get to know them, and their contributions.

Some of our trustees are leaving positions of leadership but staying on to share their Foundation experience as we continue to grow in the number of participating clubs and our impact on the Amateur community.

Our out-going president, Phil Russo - N3GDD, stays on to help chair F.A.R.FEST planning. We thank him for his two years as president and his several years of helping to make our hamfest an attractive event for attendees, vendors and product representatives.

Ed Morrision - W3RY retires as long-time treasurer. He has protected FAR funds with care and integrity for a number of years and many thousands of checks have passed through his hands. Special thanks to both Phil and Ed.

Our regular attending trustees have been doing a super job of guiding the Foundation, and we are pleased to see an upswing in representation AND INVOLVEMENT by new trustees. We are looking forward to having many more clubs participating on a regular basis in this coming year. All clubs can expect to be hearing more from (and about) FAR.

As I begin my term of office and "presiding" at our monthly meetings, I feel confident I can count on old and new trustees alike to share in the planning and execution of our collective ideas.

We do hope to see YOU at the FAR/QCWA Spring Banquet on May 10. Treat yourself to a fine social event and a non-ham presentation I am sure you will enjoy.

Tony - WA3YLO

INDEX

COLUMNS

ARRL REPORT	11
DX COLUMN	21
ELMERS' CORNER	25
FCC HIGHLIGHTS	7
GUEST EDITORIAL	30
HAM OF THE MONTH - NF3X	32
PUBLIC SERVICE REPORT	15
SRAM - Amateur Radio in the USSR	27
SILENT KEYS	26
TRAINING	22
VOLUNTEER EXAMINER CO-OP.	23
WANT ADS	55

CLUB REPORTS

AMRAD	36
Anne Arundel	50
Arlington Amateur Radio Club	40
Fauquier Amateur Radio Club	39
Goddard Amateur Radio Club	34
Green Mountain Repeater Association	46
Herndon Repeater Group	43
Laurel Amateur Radio Club	49
Maryland Emergency Phone Net	52
Maryland Mobileers Amateur Radio Club	51
Metropolitan Communications Network	45
Metrovision - Amateur TV	37
Montgomery Amateur Radio Club	41
Mt. Vernon Amateur Radio Club	38
Northern Virginia FM Assn	54
Ole Virginia Hams Amateur Radio Club	44
Prince George's Wireless Association	42
Shenandoah Valley Amateur Radio Club	53
Southern Maryland Amateur Radio Club	54
Southern Patuxent Amateur Radio Club	35
Sterling Park Amateur Radio Club	48
Vienna Wireless Society	47

ADVERTISERS

EEB Electronic Equipment Bank	10
G & G Electronics	56
Ham Radio Outlet	6
Hayman Business Systems	31
Maryland Radio	2
R.F. Connection	59
SkyPoint Ham Center	61
Virginia Micro System	40
Williams Radio	14

Coming Events

- May 2** Kent Island Hamfest, Grasonville, MD (See Page 46)
May 3 Penn-Del ARC Hamfest, New Castle, Del. KA3TWG
May 10 FAR/QCWA Annual Spring Banquet, Greenbelt, MD
 See Flyer on Page 33
May 15-17 Rochester Hamfest, Rochester, New York
May 16 Roanoke Valley Hamfest. Contact N4NPD (703) 992-1261 (p 29)
May 17 TSRAC Hamfest, Wheeling. West Virginia's largest Hamfest (p 26)
May 24 Maryland FM Assn. Hamfest, Howard County Fairgrounds (p 20)
- Jun 7** Ole Virginia Hams Hamfest, Manassas, Virginia
Jun 7 Breeze Shooters Hamfest, Butler, PA (Pittsburgh). Info N3BPB
Jun 21 Frederick Hamfest, Frederick, Maryland
Jun 24 AFCEA Amateur Radio Operators' Luncheon (See page 9)
Jun 27-28 Field Day
- July 12** Carroll County Hamfest & Computer Show, Westminster, Maryland
July 26 BRATS Hamfest and Computer Fest, Timonium, Maryland
- Aug 2** Shennandoah Valley Hamfest, Berryville, Virginia
Aug 8-9 Maryland/DC QSO Party. Info WA3AAT or WA3EOP
Aug 16 Southern Patuxent Hamfest, Uper Marlboro, Maryland
Aug 20-23 ARRL National Convention, Los Angeles, CA
- Sep 5-6** Shelby Hamfest, Shelby, North Carolina
Sep 13 F.A.R. FEST, Gaithersburg, Maryland
Sep 19-20 Virginia Beach Hamfest, Virginia Beach, Virginia
Sept ? ARRL Computer Networking Conference, Northern New Jersey
- Oct 10-11** DXPO-92 Holliday Inn, College Park, MD
Oct 11 Columbia ARA Hamfest, Howard County Fairgrounds [Not Oct 4]
Oct 18 Cumberland County Hamfest, Carlisle, Pennsylvania
- Nov 1** Mason-Dixon Hamfest, Westminster, Maryland
- Dec 6** HolidayFest '92, Largo, Maryland
Dec 11 Southern Maryland ARC Annual Christmas Dinner/Meeting,
 Camp Springs, MD Elks lodge.

1993

- Jul 17-18** Southeastern Division Convention, Atlanta, Georgia
Aug 13-15 ARRL National Convention, Huntsville, Alabama

1994

- June 10-12** ARRL National Convention, Dallas, TX

Thanks to Bob Milligan - KI4MB and the SERA Repeater Journal for providing much of the above information. Please keep Auto-Call advised of coming Hamfests and other important Coming Events. We are anxious to provide our readers with timely information and help to avoid possible conflicts when scheduling activities.

We can use all the help we can get!



HAM RADIO OUTLET

WORLDWIDE DISTRIBUTION

— 11 STORE BUYING POWER —

**HAM
RADIO
OUTLET**

CALL TOLL FREE
(800) 444-4799
Woodbridge, VA

WOODBIDGE, VA 22191
14803 Build America Drive
(703) 643-1063 Metro
(703) 494-8750 Local
19 Miles south of DC, exit 161, I-95

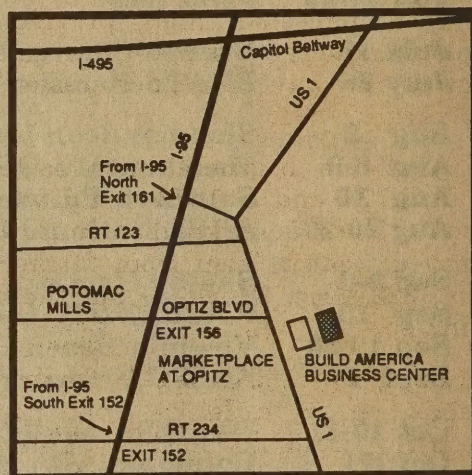
CALL, WRITE OR STOP BY FOR
YOUR FREE 92 PAGE CATALOG

THANK YOU FOR ALLOWING US
TO SERVE YOU

Curtis WB4KZL (Manager)
Chuck KM4NZ
Jerry WA2VGW
Mike KA3TMQ
John N4LJS

Louis
Penny
Michael
Tami
Phil

KC4HR
KD4BPR
N4USI
Office Mgr
Shipping



All These Major Brands In-Stock
and Much, Much More
at Discount Prices

CALL TOLL FREE
(800) 444-4799

CALL TOLL FREE
(800) 444-4799

AEA

AMERITRON

AZIMUTH

B&W

Cushcraft
CORPORATION

ALPHA DELTA

ETC

CREATE

AS
antenna specialists

ALMCO ELECTRONICS

ASTRON
CORPORATION

DIAMOND
ANTENNA

HUSTLER

GEOCHRON

hy-gain

Kantronics

concept

HEIL
SOUND

BENCHER, INC.

KENWOOD

MIRAGE

ICOM

SONY

MFJ

Larsen

YAESU

uniden

US
TOWER

VIBROPLEX

Valor

TEN-TEC

FCC Highlights

by Jack Kelleher - W4ZC

WHITHER GOEST H.R. 73?

H. R. 73 "The Amateur Radio Spectrum Protection Act of 1991" was introduced in the House of Representatives in January 1991. Essentially the same bill has been introduced in the Senate as S 1372. We Amateurs would be well-advised to consider carefully the con's as well as the pro's of these bills, or the baby may be thrown away with the bath water.

H.R. 73 proposes adding a new paragraph to the Communications Act of 1934 as follows: "The Federal Communications Commission shall not diminish existing allocations of spectrum to the amateur radio service after January 1, 1991. The Federal Communications Commission shall provide equivalent replacement spectrum to the amateur radio service for any frequency reallocation after January 1, 1991."

Amateurs in general have reacted favorably to H.R. 73 and S 1372; and why shouldn't they? Here is a knight on a white horse, come to protect them from further losses like 220 - 222 MHz. Maybe - but the FCC doesn't think so.

In May 1991, FCC Chairman Sikes, responding to a letter from Representative Cooper, said in part: "This legislation, if enacted, will significantly restrict the Commission's ability to fulfill one of its primary functions - managing the radio spectrum. It would limit the Commission's ability to respond to the spectrum requirements of new technologies and thus make more difficult our ability to foster telecommunications competition in foreign markets. The effectiveness of the Commission's spectrum management program is dependent on the ability to alter dynamically the table of frequency allocations. . . . To constrain, if not freeze, the Commission's ability to manage the spectrum for one service, inevitably, will constrain our ability to deal effectively with all services. Further, the Commission needs flexibility in its domestic spectrum allocations in order to respond in the best interest of the United States in international spectrum allocation negotiations to meet future requirements."

Mr. Sikes' concluding comment was "Although I appreciate the concern of many for the continued well-being of the Amateur Radio Service - indeed, I share that concern - it is my belief that enactment of H.R. 73 would be ill-advised and counterproductive."

Chairman Sikes reiterated his position in a letter to Senator Alan K. Simpson (R-WY) concerning S 1372. Among other things, he said: ". . . we are concerned that enactment of this legislation would encourage other interests with requirements just as legitimate as those of the amateur service (e.g., the broadcast community, the public safety community, the cellular radio community, satellite interests and land mobile interests) to insist that Congress provide similar "favorite son" legislation".

Your editor's misgivings about this legislation are that its bad implications may equal or even outweigh the good it attempts to do. An abbreviated form of Newton's third law says that for every action there is an equal and opposite reaction. One possible adverse reaction to passage of these bills, protecting the bandwidth we Amateurs now enjoy, is that it might make it difficult or impossible to add to that bandwidth in the future. In other words "you've protected what you have - that's all you're going to get". Is that a price we would be willing to pay?

220 - 222 MHz POT STILL BOILING

(From W5YI Report, 3/15/92)

In FCC comments, the American Red Cross has strongly opposed United Parcel Service in its bid to reduce the availability of 220-222 MHz frequencies. The Red Cross was critical of the FCC's decision to reallocate the 220-222 MHz band from Amateur use to the commercial and government land mobile services. That reallocation was promoted effectively by United Parcel Service: UPS declined to use already available spectrum for its nationwide network, as its competitor Federal Express had done.

(Continued on page 8)

FCC Highlights - Continued

After it became clear that the FCC would not return the 220-222 MHz band to hams, the Red Cross applied for licenses in the reallocated band on May 1, 1991. It viewed these licenses as necessary to modernize its disaster communications and to replace communications resources that had been provided by Amateur volunteers.

The FCC has decided, in this case, to use comparative hearings rather than a lottery to determine which applicants will receive licenses. The Red Cross said that the FCC's proposal to use hearings when it already said it would use lotteries is "inexplicable, save for the apparent continued saturation lobbying effort of United Parcel Service". This turn-about, the Red Cross said "...is a thinly-veiled effort to afford large, wealthy entities such as UPS the ability to use that wealth as a hammer to be wielded against those applicants (such as the Red Cross) with less capital in the inherently expensive, protracted, and totally unnecessary comparative hearing process".

SUPREME COURT REFUSES TO HEAR APPEAL ON "INDECENCY" RULING

(From ARRL Letter, 3/11/92).

The U.S. Supreme Court has refused to hear an appeal of a decision of a U.S. Court of Appeals which held unconstitutional an around-the-clock ban on indecent broadcasts. The high court let stand a May 17, 1991 decision of the U.S. Court of Appeals for the District of Columbia Circuit which held that broadcast material which is indecent but not obscene is protected by the First Amendment, and any restrictions on such broadcasts must be narrowly drawn. The appeals court instructed the FCC to determine the times at which indecent material may be broadcast. In doing so, the FCC must determine the times when there is a reasonable risk that children, who may properly be protected by the government from such broadcasts, are in the broadcast audience.

The decision of a three-judge appeals court panel unanimously concluded that a 24-hour per-day FCC ban on indecent Broadcasts, even though mandated by Congress, was unconstitutional. The Court of Appeals had earlier determined that the FCC must carve out a

"safe harbor" for such broadcasts, but recognized that even constitutionally protected speech can have a "strong negative impact on children". Thus, limitations on indecent broadcasts can be imposed, if carefully and narrowly crafted.

The FCC was referred to that holding for further action. Obscene broadcasts are not protected and may be prohibited entirely.

FCC has continued to impose fines on broadcast stations for indecent broadcasts made during the times of day in which children are clearly in the audience.

The implications of the court rulings for Amateur Radio are unclear at present, though FCC has previously stated that its policies regarding broadcast indecency are equally applicable to Amateur Radio, noting similarities between the two services. FCC Chairman Sikes has recently stated that it is FCC's intention to enforce its rules concerning indecent broadcasts to the extent permitted by law.

FCC STEPS UP COMPUTER ENFORCEMENT

(From W5YI Report 4/1/92)

According to reports, the FCC is seeing poor compliance with its certification rules by some vendors of personal computers. A survey last year found that more than half of the computers offered for sale did not have FCC certification.

The FCC's Baltimore field office has just mailed out 10,000 warning letters to computer builders and re-sellers in its region. Only three percent of 100 vendors at a Maryland computer show last January were selling equipment with the FCC label - and two of these vendors were later determined to have put phony information in the label.

While Amateur Radio operators may construct personal computers for their own use without going through the FCC's equipment authorization procedure, these computers may not be offered for sale to others - especially if they have capabilities exceeding those of Amateur Radio applications.

(Continued)

FCC Highlights - Continued

THROW AWAY YOUR RADAR DETECTOR? Spread Spectrum for Quiet Smokies.

On March 5 the FCC gave the green light to development of "undetectable" police radars. Applied Concepts Inc. filed RM-7317, a petition to widen the authorized bandwidths in the 24.05-24.25 and 33.4-36.0 GHz bands used by the Radiolocation Service. The Applied Concepts radar uses the wideband spread spectrum technique known as frequency-hopping, and requires more than the 50 MHz bandwidth currently permitted.

Several commentators opposed the change, one saying that legislatures should determine whether traffic radar should be undetectable. Radar detector maker Whistler Corp. said it and other companies have "repeatedly demonstrated the technical capability of developing systems that can track any radar technology". And possibly tipping its hat on future product interests, Whistler argued that wideband traffic radar may preclude vehicle collision avoidance systems. The FCC said that vehicle collision avoidance systems would

be authorized under FCC Rules Part 15 - and thus would not be protected from interference from authorized operations such as police radar.

FCC SUSPENDS HAM LICENSE OF ALLEGED PIRATE

(From W5YI Report, 4/1/92).

On March 9 the FCC suspended the General class license of Michael J. Labadia-N2IFY, and began proceedings to revoke his operator license. The FCC said that on several occasions last year and earlier this year, Labadia apparently "operated an unlicensed or "pirate" radio station identified as "Hope Radio International" on a frequency of 7411 kHz, in apparent willful violation of Section 301 of the Communications Act of 1934, as amended".

On April 12, 1991, a Commission engineer warned Labadia against unlicensed operation and asked to inspect the station. Labadia apparently refused to make his station available for inspection.

AFCEA Amateur Radio Operator's Luncheon

The Armed Forces Communications and Electronics Association (AFCEA) Annual Amateur Radio Operator's Luncheon will take place on Wednesday, June 24th at the WASHINGTON CONVENTION CENTER. Tickets are \$25 to AFCEA members and \$30 to non-members (Credit cards accepted). Order your tickets from:

The AFCEA Programs Office

4400 Fair Lakes Court, Fairfax, VA 22033-3899

Phone (703) 631-6125

Please get your order in as soon as possible as this is a catered event and meals cannot be ordered at the last minute.

The WASHINGTON CONVENTION CENTER is conveniently located between Gallery Place and the Metro Center stations of the subway system.

We anticipate having a speaker from the FCC dealing with Amateur Radio matters. If you would like to make an announcement during this luncheon, or would like additional information, please contact the undersigned. Free admission tickets to the large exhibit area are available to attendees of this function. We look forward to seeing you again this year.

Stuart Meyer, W2GHK, AFCEA VP for Amateur Radio

2417 Newton Street, Vienna, VA 22181

Phone (703) 281-3806 FAX (703) 281-3868

THE NEW GENERATION ROTATORS

THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

	The New Generation									Old Generation	
Model/Specs	Create RCS	Create RC5A	Create RC5B	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FOX	Emoto 1300MSAX	Emoto 1800FSX	Telex Ham IV	Telex T2X
Torque Ft/Lb	43	116	160	37	50	57	143	215	287	67	83
QDR Right Ant Inertia	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Bk Static Torque Ft/Lb	506	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load in Tower (lb)	10	25	25	11	22	27	27	33	36	15	20
Max mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	60
Rev Delay	None	2 sec	3 sec							None	None
Preset	Opt 3	Opt 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Max Dia	2-2.5 in	2-2.5 in	2-2.5 in	2-2.4 in	1-6-2.4 in	1-6-2.4 in	1-6-2.4 in	2-4-3.1 in	3-5-5.5 in	2 in	2 in
Controls wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Vertical max load #	880	1540	1540	660	1100	880	1780	1760	2200	400	800
Motor size	13	17	20	7.5	9	11	11	13	39.5	24	28
Brake type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center mast clamp	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Speed notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Prong (s)	\$269.00	\$449.95	\$799.00	\$209.95	\$399.00	\$589.00	\$679.00	\$1099.00	\$272.00	\$369.95	\$439.95
With Preset	\$379.00	\$528.95				\$663.00					

Notes:

1. Turns Transducer 470° in 35 seconds.

2. T2X and Ham IV have same motor and gear train parts.

3. 120V normal 220V special order.

4. Variable speed 40 sec max.

5. EEB prices as of 5/91 subject to change.

6. Wind Load in Sq. Feet.

7. Variable speed w/SCR constant rotational torque at any speed.

8. 120/220 taped transformer.

THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

CREATIVE DESIGN ROTATORS

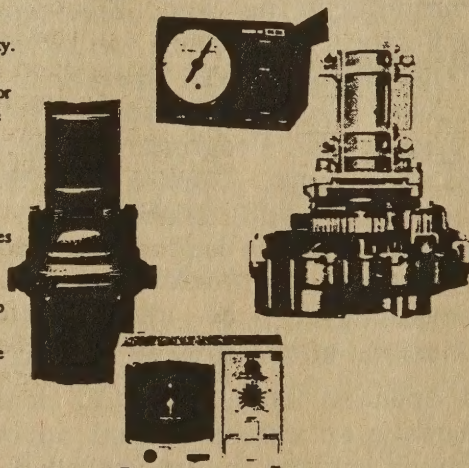
CREATE is serious about long term reliability. The CREATE RC5 series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

ROTOR FEATURES OF RC5 SERIES

- * Large strong reduction gear system provides long term reliability during years of rugged operation.
- * Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions.
- * Cast and machined aluminum case provide the strength required for long lasting service.
- * Mast clamp guides for ease of mast installation.

CONTROLLER FEATURES OF RC5 SERIES

- * Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating spec is constant 60 to 200 seconds per 360 degrees.
- * Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system.
- * Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east).
- * Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD² formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft=1 meter. Calculate your GD² then compare EMOTO GD² spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)

L: length of longest element (m)

B: length of boom(m)

GD² EXAMPLES: Kgm²

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700D5X should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.



Electronic Equipment Bank 323 Mill Street, N.E. Vienna, Va. 22180
Phone (703) 938-3350 Orders 800-368-3270
Call - Write - FAX - for full detailed flyer
EEB Your Professional Amateur Dealer

American Radio Relay League Report

By John Swafford -- W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

WARC-92 Finds Room for New Services With Minimal Impact on Amateurs.

The 1992 ITU World Administrative Radio Conference (WARC-92) finished its work more or less on schedule, with delegates scrambling in the closing hours to find compromise solutions that each administration could live with.

The major decisions of WARC-92 are:

1. HF broadcasting expansion. An additional 790 kHz below 10 MHz, was allocated to HF broadcasting. The conference also adopted a recommendation that a future conference "should consider the possibility of aligning the allocations to the amateur service around 7MHz, with due regard to the requirements of other services." This would permit the issue to be addressed on its own merits, without the precondition of broadcasting expansion.

2. Mobile satellites, including low-earth-orbit satellites (LEOs). Coordination procedures were adopted for non-geostationary satellite networks, and new allocations were established for such networks. So-called "little LEOs" (low-cost, low-rate data satellites operating below 1 GHz) gained a primary uplink allocation at 148-150.05 MHz with downlinks at 137 and 400.15 MHz, and secondary allocations at 312-315 and 387-390 MHz. So-called "big LEOs" (such as Motorola's proposed Iridium system of 77 satellites which are intended to provide voice-grade service to hand-held equipment) gained access to the spectrum they were seeking near 1.6 and 2.5 GHz, but subject to limitations and procedures designed to protect global navigation systems with which they will share spectrum. The mobile-satellite allocations near 1.6 and 2.0 GHz also were expanded.

3. Aeronautical public correspondence. Two separate systems were sanctioned, one using bands near 1.67 and 1.8 GHz and a North American system which is already in operation using bands near 849 and 894 MHz. If the two separate systems are implemented, aircraft flying between North America and other continents will have to carry equipment for both in order

for passengers to have the service.

4. Satellite sound broadcasting (and a complementary terrestrial service). A worldwide band was established at 1452-1492 MHz for digital sound broadcasting, but a number of countries, including the US, do not plan to implement the service in this band and are looking at 2310-2360 or 2535-2655 MHz instead. (Amateurs in the US already are excluded from 2310-2390 MHz in order to protect aeronautical flight test telemetry from interference.)

5. High-definition television. No worldwide band could be found for this service. In Regions 1 and 3, 21.4-22 GHz will be made available; in Region 2, the band will be 17.3-17.8 GHz.

6. Bands near 2 GHz were identified for future implementation of Future Public Land Mobile Telecommunications Systems (FPLMTS) but were not actually allocated for this purpose, since an allocation was regarded as premature for a system which is still largely undefined.

7. Other mobile services. In Region 1, the Mobile Service was upgraded from secondary to primary in a broad range from 1.7 to 2.45 GHz, including 2.3-2.45 GHz. (Mobile is already primary in the latter band in Regions 2 and 3.) Depending upon how administrations in Region 1 decide to implement new mobile services in this range, there could be implications for the continued use of the band by their amateurs.

More than 1,400 delegates representing 127 countries attended WARC-92. The International Amateur Radio Union, as the recognized representative body for the Amateur and Amateur-Satellite Services, was among 31 international and regional organizations invited to participate as observers.

The Final Acts of WARC-92 enter into force on 12 October 1993. However, a number of later effective dates, e.g., 1 April 2007 for the new HF broadcasting allocations.

(Continued)

ARRL Report - Continued

Streamlining Novice Examinations.

The ARRL on February 26, 1992, filed with the Federal Communications Commission a petition for rule making to require that all Novice class Amateur Radio license examinations be administered under the current volunteer examiner (VEC) program. The Novice class currently is the only examination that may be taken outside the VE program (i.e., under the supervision of two General class or higher class amateurs) as well as taken through the VE program.

Also, on February 26, and fully-coordinated with the ARRL, the W5YI-VEC submitted a complementary petition, also seeking to incorporate the Novice testing program into the VEC examination system.

When the FCC originally established the VE program in 1982 (in Docket 83-27), the Novice class license was not included because a Novice volunteer examiner system had already been in place since the inception of the Novice license in the early 1950s. It did not seem necessary to disrupt a system which had worked for nearly three decades.

Then, in 1986, to encourage more newcomers to the Novice class and to promote upgrading as well, the League and others petitioned the Commission to increase operating privileges for Novices. As a result, the Commission, Docket 86-161, granted Novice class licensees telephony privileges in the 10-meter band, and certain VHF and UHF telephony privileges as well. This greatly changed the character of the Novice license class.

At the same time, the League suggested that because of the additional privileges offered to Novices, the number of Novice examiners should be increased from one to two, in order to maintain the integrity of the examination process.

A number of the commenters, however, suggested that the entire Novice program should be brought within the VE system. The League resisted this proposal, feeling such a system would overburden the new VE program. There also was a fear that bringing the Novice examining program into the VE program would result in a decrease in the overall availability of examinations for Novices, then the only entry level license class.

In the 10 years since the VE program began, the Novice license has gained greater significance, particularly from the granting of HF voice privileges. It also no longer is the only "entry class of license," the code-free Technician class license now offering an alternative to the Novice license.

Another reason for the original (1950s) Novice testing method -- that it allowed prospective Novices to find potential volunteer amateur examiners in virtually any area of the country, also seems less significant in 1992. The resounding success of the VE program has resulted in testing opportunities for all classes of license in every corner of the country.

FCC figures for January, 1992, show that, of a total of 3,973 new licensees for the month, 3,318 were Technician class licensees, and 655 were Novices. "The burst of newcomers to the Amateur Radio Service following the creation of a codeless license class has been handled capably, and apparently without significant strain, by the VECs and VE teams," the League's petition says.

And many VE examination sessions already provide an opportunity for newcomers to take Novice examinations, although the Novice program is not now officially a part of the VE program. In fact, the League, recognizing that the Novice class license after 1987 conveyed far more significant operating privileges than it had previously, established in July of 1990 as its policy (as the ARRL VEC) that all Novice class examinations should be administered under the system of three-member teams of accredited volunteer examiners (when only two are required by law); and that accredited volunteer examiners holding General class licenses should be authorized to administer Examination Elements 1A, 2 and 3A.

The League suggests that bringing Novice exams into the VE program would provide smoother and more accurate submission of Form 610s to the FCC; that any "problem" applications could be handled by FCC dealing only with one of fewer than 20 experienced volunteer examiner coordinators, rather than with the thousands of licensed amateurs who may administer a Novice examination; and that "the integrity of the examination process would be constant in all amateur examinations, Novice through Amateur Extra class."

(Continued)

ARRL Report - Continued

ARRL President George S. Wilson III, W4OYI, was scheduled to be in Washington on March 13 to discuss the matter with FCC commissioners and bureau chiefs, and to urge increased enforcement efforts to resolve what many amateurs believe is a serious problem.

Shuttle Lifts 4 Hams Into Space.

SAREX Space Shuttle STS-45 lifted off at 1313 UTC on Tuesday, March 24 after fuel leaks delayed the scheduled March 23 launch (which probably would have been scrubbed because of weather anyway). The scheduled eight-day mission features a high inclination (57 degree) orbit. Due to the need to conserve Shuttle power, SAREX Configuration B was selected. Configuration B is battery power, 2-meter FM voice using the side window-mounted antenna on Atlantis.

Four of the seven astronauts are licensed amateurs: Mission Specialist Dave Leestma, N5WQC, Pilot Brian Duffy, N5WQW, Payload Specialist Dirk Frimout of Belgium, ON1AFD, and Mission Specialist Kathy Sullivan, N5YYV.

The FCC requirement of an Extra Class license for operation from space was waived by the Commission for all licensed astronauts on STS-45, including Frimout. In addition, on March 20 special temporary third-party agreements for the flight were made between the US and Belgium and Norway. These are for the exchange of messages between the shuttle and "authorized stations" in those countries; in the case of Belgium, this is limited to students at the "Euro Space Center Belgium."

Pilot Brian Duffy, an astronaut since 1985, was the subject of an Associated Press profile story on March 20, as the countdown for STS-45 began. Duffy (the AP said) "recently earned his ham radio operator's license so he could use the amateur radio aboard Atlantis to chat with school children and other folks."

"If you were in elementary school (Duffy told the AP) and somebody said 'Hey, guess what, we're going to talk to an astronaut in space,' I would have thought that was the greatest thing in the world as a kid."

STS-45 is billed as a "CQ mission," since there will be a number of opportunities for hams worldwide to make random contacts. Several US and foreign school groups have been scheduled

for contacts as well. Since Frimout and Sullivan are fluent in several European languages, they hope to make a number of contacts with hams there.

It is not necessary to have sophisticated VHF equipment or large satellite antennas to work this SAREX station. As a case in point, contacts have been made with previous Shuttles using only a handheld transceiver and whip antenna. Similar contacts have been made with Russian MIR cosmonauts under favorable conditions. However, the odds of making a contact with marginal equipment are quite low for amateurs within the continental United States.

Check W1AW and your local packet BBS for late word on bulletin times, frequencies, and other SAREX mission information.

BRIEFS

o DXCC Specialist Don Search, W3AZD, has left the headquarters staff after nearly 15 years of service. An opening thus exists in the DXCC branch, with a starting salary in the \$24-26,000/year range, and interested amateurs should contact Membership Communications Services Manager Chuck Hutchinson, K8CH.

o Effective September 1, the VHF/UHF Century Club (VUCC) will be available for satellite work. The minimum number of grid squares to qualify is 100, and the award is endorsable in increments of 25. Applications will be accepted during a one-month "window" beginning August 1 and held for processing beginning September 1. The five qualifiers with the highest number of grid squares claimed within the window period will be awarded plaques. The application received during the window period with the highest total number of grid squares will be assigned the Number 1 certificate. Subsequent numbers will be assigned in accordance with the number of grid squares claimed. After the window period, numbers will be assigned in accordance with the date the application is received.

o League Headquarters will open its doors for its annual open house on Sunday, June 7, from 10 a.m. to 4 p.m. The Newington Amateur Radio League will hold its annual flea market the same day at a different site. All are invited to tour both the Headquarters and W1AW facilities.

WILLIAMS * ALINCO

WE MAKE HAMS HAPPY!

Tired of "Impersonal" service and frustration when Trying to learn and buy that new radio! Maybe Williams Radio and Alinco has the answer!

Williams stocks all Alinco radio models and available accessories. You'll love our "personalized" customer service. It's no wonder that Williams was named the #1 Alinco store in 1989, 1990 and 1991. We carry ONLY Alinco. High volume sales and low overhead are an advantage to you. Williams - The Best Deal!!!

ALINCO TWIN BAND 2/70 MOBILES 45 & 35 WATTS DR-570T - DR599T

DR-570T - Full featured, Duplexer, Sub-tones, 20 chan. DR-599T - removable head, and remote control capable with DSQ opt. board, 40+ chan. Keyboard entry from mike. AM Acft. much more! Both models cross-band repeat, full duplex & twin readouts.

ALINCO 2M MOBILES DR-110T - DR-112T 45 W DR-1200T DIGITAL 25W

Small, powerful. Subtone enc/dec incl. DR-110T red LCD, DR-112T black LCD w/org backlight. TT mike, full featured., 14 chan Unique spring type bracket. DR-1200 especially designed for Digital use. Can modify for 9600 baud. Wiring diagrams all TNC incl.

ALINCO HANDHELD A Model To Fit Your Need!

DJ-160T - 20 mem., **DJ-F1T** 40 mem. + Acft. DSQ, Mini size. 3-watts, **DJ-F1TH** -5-watts. Both are 2M. **DJ-560T** 2/70 Twin band, Has 20 mem. each band. **DJ-580T** New! 2/70 Mini Twin Band. 40 Mem. DSQ, Acft, Everything! All Alinco H/Ts have 700 mah batt. paks, approx 3W. All have DC inputs, DSQ, LCD and much more.

ALINCO PRICE BUSTERS!

DJ-S1T - No TT pad, Alk. Batt Pak (rest features like DJ-F1T. **DJ-162TD** Acft, alk. pak. rest features of DJ-160T. Both radios priced unbelievably low!!



ALINCO
ELECTRONICS INC.



Williams - The Largest - Stocks All ALINCO Radios & Accessories!

We Specialize in Alinco ONLY! Naturally our stocks are much larger than about anyone else. Call Us For Super Deals - Extra Customer Discounts on all Alinco Accessories. We charge your H/T Battery. We guarantee your Alinco 100% when it arrives-or we replace it-NO Hassle!

Any prices quoted are CASH! Please add \$4.00 UPS shipping. N.C. residents add 6% Sales Tax. Call for VERY competitive prices. Call for COD UPS and we will PAY your COD costs. For the best overall deal, you can't beat Williams Radio and Alinco. Visa & Mastercard Accepted.

WILLIAMS RADIO SALES
600 LAKE DALE ROAD
COLFAX, N.C. 27235

ORDERS ONLY - NOON to 5:00 PM
(919) 993-5881
ORDERS & TECHNICAL 7 to 10 PM

Public Service Report

Hank Black - N3ESR

(301) 340-8595

Material for the PUBLIC SERVICE REPORT can be left to N3ESR on the WA3ZNW packet bulletin board on 145.090 MHz, called by telephone, or mailed electronically by modem on arrangements, or mailed to Public Service Report, 105 North Van Buren St., Rockville, MD 20850-1860. Deadline for receipt of material is the third of the month.

Deadline for receipt of material is the third of the month.

HAMS HELP SPECIAL OLYMPIANS

On March 28th, Fairfax County Amateur Radio Emergency Services (ARES) provided communications support for the Virginia Special Olympics 1992 Spring Games which were held at 15 different sites throughout Fairfax County. Over 750 "Special Olympians" and 35 amateur radio operators participated in the event.

Due to the complexity of the logistics for the event, two directed nets were set up. One net, which was run on the 146.91 MHz repeater (NVFMA), coordinated communications between all 15 locations. The other net was a simplex net for the coordination of the event management personnel at the headquarters site, Robinson High School. Administrative nets were also conducted on 224.10 MHz.

The event posed quite a communications challenge due to the wide distance between event locations, and the number of events taking place inside the cement and metal school buildings. Net control was run completely on battery power in case of commercial power failure.

Amateur radio served as the main communications link because, although each school or site could make outgoing telephone calls, the switchboards were closed and incoming calls were not possible. In addition, radio "shadows" were with senior event personnel, making it possible for them to be reached at any location.

Thanks to the operators who volunteered their Saturday to make it a memorable Special Olympics: N4BV, N4BYF, KB2CEV, KD4CCT, KK4GB, N4GUS, WB4EEA, KI4HK, W8HNT, N3IWM, N4JGQ, KN4JS, W4MFZ, KC40CG, KA4REI, AA6RM, KC4RON, N4TCI, N4ULS, N4URL, N4VJS, WB4WV, W4XG, KA4YMA, KC4ZPM, WA2WEP, W4LFO, W3GPM, WB4WZZ, KC4WES, KC4EFJ & N4SCK.

-Submitted by Ed Ober - KC4EFJ, Fairfax County EC.

DISTRICT OF COLUMBIA ARES PARTICIPATES IN I.E. ZELDA EXERCISE

The National Capital ARES Group participated along with several other organizations during the I.E. Zelda exercise on March 17-18 at the District of Columbia's Office of Emergency Preparedness.

Three amateur operators worked along side several other organizations in a "table top - what if" exercise. The exercise (D.C. involvement) ended up on Wednesday with the District of Columbia being destroyed by flooding and high winds.

Although no actual message were passed outside of the OEP office, several points of information were brought to light. The National Capital ARES Group would like to thank the following for their services: Chester R. Martin - W3EIL; Cyrus Parker - N3EPH; and Ernest "Steve" Stephens - W3ETX.

Anyone who would like more information about the District of Columbia ARES Group can contact the District of Columbia Emergency Coordinator, Dave Drysdale - N3JGL, at (202) 291-3838.

-Submitted by Dave Drysdale - N3JGL - D.C. EC.

Public Service Report - Contined

MONTGOMERY COUNTY EXPERIENCES CENTRAL OFFICE & 911 OUTAGES

Montgomery County RACES Officer, Charlie Newtown - WA3HNN, learned of a telephone outage around 8:30 a.m. on Saturday, April 4 which effected the Rockville area including the Emergency Communication Center which provides 911 service for Montgomery County Police and Fire Services. RACES Officer Charlie Newton learned of the outage through commercial radio public service announcements.

WA3HNN contacted Bob Whitely - N3HQX, on the 146.955 MHz Montgomery Amateur Radio Club (MARC) repeater around 9:10 a.m. N3HQX had phone service and contacted Rita Magee - KA3WHT, Montgomery County Emergency Management Program Specialist, to advise her of the situation and receive instructions.

While N3HQX was making his call, WA3HNN proceeded to the Emergency Management Group Disaster Operations Communications Room at the Montgomery County Council Office Building and put RACES/ARES radio station WA3YOO on the air in a standby mode using 146.46 MHz simplex, the MARC 146.955 repeater and the National Institutes of Health Amateur Radio Club 145.29 MHz repeater, K3YGG.

The following RACES stations (on stand by) were on frequency: KA3RWX and N3HQX on 146.46 MHz; W3QBC, N3JOQ and KA3HJT on 145.29 MHz; and N3HVC on 146.955 MHz.

About the time WA3YOO went on the air, phone service was restored. Preliminary information indicated that there was a software problem with Chesapeake and Potomac's Central Office updates which led to the outage lasting about one and one-half hours. WA3YOO secured at 10:59 a.m.

- Information submitted by Charlie Newton, WA3HNN
Montgomery County RACES Radio Officer

PUBLIC SERVICE CALENDAR

- | | |
|-----------|---|
| May 2 | Dogwood Half-One Hundred.
Contact John Anastas - KJ4EK (703) 667-6046 or
Bob Lewis, N4SCK (703) 830-7325 |
| May 2 & 3 | American Lung Association 100 Mile Bike Ride.
Contact Bob Lewis - N4SCK (703) 830-7325 or
Ed Ober, KC4EFJ (703) 591-0422 |
| May 3 | Bethesda-Chevy Chase Parade
Contact Hank Black - N3ESR (301) 340-8595 |
| May 10 | Spring Fever Bialathon, Clearbrook, Virginia
Contact Walt Johnson - WA4HVV |
| May 11 | National Capital ARES Council Meeting 10 a.m.
(location to be announced)
Contact Hank Black - N3ESR (301) 340-8595
or listen to 146.91 MHz, Sundays at 2100 hrs. |
| May 16-17 | National Multiple Sclerosis 150K Bike Tour
Contact Dave Rogers - N4JGQ (703) 237-5465 or
Bob Lewis - N4SCK (703) 830-3495 |



SKYWARN

SKYWARN AMATEUR RADIO STATION
At National Weather Service Dedicated and Used
Extensively During Training Exercises Hurricane Zelda.



The new Amateur Radio Station at the National Weather Service Washington Forecast Office has been installed and has had its first real workout!

The station was funded by a grant from the Foundation for Amateur Radio, Inc. and includes 2-Yaesu FT-2400H's (for two 2 meter voice nets); 1-Yaesu FT-712 (for 440 voice net); 1-Yaesu FT-5200 (2-meter/440 dual band) which is connected to a AEA PK-88 (for 2-meter and 440 packet operations). The station is powered by a 50 amp Astron power supply which is connected to the NWS uninterruptable power supply and the backup diesel generator. Three Diamond dual band antennas are mounted on the NWS's 50 foot tower. The equipment was purchased with a courtesy discount from Ham Radio Outlet in Woodbridge, VA. The station is mounted on a beautiful brazed and painted steel bookcase with wooden shelves built by Bob - KK4GB. Provisions have been made for the emergency installation of a HF radio and a HF antenna when needed. The purpose of each radio is identified by an engraved plastic label and a dedication plaque has been mounted on the station.

On Thursday, March 26 the SKYWARN Amateur Radio Operation and new Amateur Radio station were featured in a televised interview with John Curly, News Channel 8 meteorologist. The segment aired numerous times on March 26 and highlighted the importance of the SKYWARN program to the NWS mission of saving lives and property.

The station is a true source of pride and has already been proven a useful and functional station under real severe weather operations. The Public Affairs Office of the National Weather Service Headquarters has given the station outstanding publicity. Beside the television coverage, the NWS has sent press releases to over 1000 media outlets. Tours are available during good weather and with the prior permission of the NWS. Call Dan - KC4OCG, to make arrangements.



Standing: Bob Dooley-KK4GB, Phil Russo-N3GDD, Barbara McNaught-Meteorologist.
Seated: Bob Lewis-N4SCK, Judy Lewis-KC4WES. Right: Jim Belville-Meteorologist in Charge

HURRICANE ZELDA COMES TO TOWN!

The Amateur Radio Community got to strut its emergency preparedness skills during the culmination of Hurricane Training Exercise IE Zelda. The exercise involved numerous federal, state and local emergency management agencies as well as hundreds of Amateurs.

Before it was over ("on paper") numerous funnel clouds were sighted, at least five tornados touched down, rivers and dams overflowed, bridges flooded out and were washed away, Georgetown, DC and Old Town Alexandria were under water and winds blew down telephone and power lines. Barbara McNaught, of the Washington Forecast Office, was the principal writer of the script.

The hurricane's location and characteristics were announced by NOAA weather radio starting on March 12. On March 17, 18, and 19 the storm climaxed with scripted test storm reports being made on time cue by Amateurs located around the region. These reports were called into the SKYWARN Amateur Radio station. 2-meter and 440 voice and 2-meter packet were used extensively. At the end of the exercise, on March 20, local emergency managers were left with the task of dealing with the catastrophic damage left in Zelda's wake.

On March 18 the Emergency Operation Centers (EOCs) around the region were activated. The exercise proved that HF is useful for communicating between NWS Offices in Sterling, Richmond, Norfolk, Lynchburg, Roanoke and Elkins, WV as well as with the Richmond EOC. In the past, various NWS offices have lost communication due to storms and cable cuts. Amateurs will be called in to assist in future outages.

Many of the EOCs successfully tested the Amateur's capability to get reports into, and warning messages out of, the NWS via Amateur Radio. One request was particularly chilling even though it was a drill. The traffic from the Rockingham County EOC, reporting that the dam was beginning to overflow and the bridge was under water, was dramatic. The warning in response from the NWS hydrologist that another 6" of rain was expected and to evacuate and expect the worst was frightening.

At one point in the drill the script called for the telephones to become inoperable. The NWS had Amateurs transmit a River Flood Warning to the Richmond EOC by packet. The warning was copied on a disk from the NWS computer in ASCII format and was transmitted successfully to Richmond without rekeying.

Overall, the SKYWARN effort was a success. Like any exercise, a good deal was learned and a number of suggestions for improvement will be implemented.

On behalf of the SKYWARN program, the NWS and Barbara McNaught, I would like to thank all participants, repeater operators and Amateurs for giving ZELDA traffic priority. The following Amateurs took shifts at the SKYWARN Amateur Radio station during the workday and are especially thanked for giving their time, effort and skills: KC4UBT; W4XG; KC4YHJ; KB2CEV; KB4IKU; K4FHK; W8HNT; KK4GB; KC4OCG; K2HJ; W14A; KB4ZJ; KM4FJ; KC4YMP and WB8ZRP.

Participation in the SKYWARN Amateur Radio Severe Weather Spotter program is open to all Amateurs experiencing severe weather. The net controllers use scripts which list the NWS severe weather criteria. The reports received by the net controllers are immediately transferred to the forecasters. Special weather statements issued by the NWS are read by the net controllers to keep the Amateur Radio community informed of updated weather situations. The SKYWARN net has gained a large following of Amateurs and non-Amateurs. The non-Amateurs include emergency managers, scanner listeners and others interested in severe weather. Keep up the great work! Our efforts have put Amateur Radio's best foot forward and has saved lives and property in the process.

SKYWARN TRAVELS TO HARRISONBURG, VA

On February 6, Dan - KC4OCG spoke to the Massanutten and Valley Amateur Radio Associations on SKYWARN operations. The meeting was well attended and much progress was made in coordinating procedures between the Shenandoah Valley SKYWARN spotters and the main SKYWARN net. Dick Weaver - W4JZC and Jeff Rinehart - WB4PJW have taken on the position of SKYWARN Operations Manager in Rockingham and Augusta Counties, respectively. Nelson - W4BHD is thanked for making the round-trip to Harrisonburg with KC4OCG.

SKYWARN ACTIVATED FOR SNOWSTORM ON FEBRUARY 13.

SKYWARN was activated for a snowstorm which hit the National Capital Area on February 13. With the assistance of Tom - W3IWI, a packet bulletin addressed to Alert @SKYWARN was posted on area BBSs the day before the storm. The message identified the nature of the storm, the information requested by the weather service, and the frequencies to be used. The Shenandoah Valley voice and packet links proved quite successful. Hourly check-in nets were held on 147.300, the WA4TSC Bluemont repeater, from 7:00 a.m. until 7:00 p.m. Each net lasted approximately 10 minutes and took an average of 10 reports. The information was faxed to the forecast office. Forecasters used the reports along with Doppler radar information to track the storm and to determine its intensity. The NWS thanked the Amateurs for their excellent job. Hourly check-in nets will continue to be used in the future for slow developing storms.

SKYWARN ACTIVATED FOR SNOWSTORM ON FEBRUARY 22.

The NWS Washington Forecast Office activated SKYWARN for a snowstorm on March 22. Although the storm did not produce much accumulation in the National Capital Area, the snow fell hard at times and reduced visibility. SKYWARN Amateur Radio spotters helped track the storm. Hourly check-in nets were held from 10 a.m. to 5 p.m. on the WA4TSC 147.300 repeater. Judy Lewis - KC4WES acted as net control and Dan - KC4OCG typed the traffic into a packet link to the NWS. The packet information was received almost real time and was very useful to the forecasters. The voice and packet combined nets will be used in the future.

MAY SKYWARN TRAINING SCHEDULE

- | | |
|------------------------|---|
| Saturday, May 9 | 2-5 p.m. SKYWARN Basic Spotter Training, Harrisonburg Holiday Inn.
Contact: Richard Weaver - W4JZC for preregistration at (703) 867-5600.
Instructor: Barbara McNaught |
| Tuesday, May 12 | 7-10 p.m. SKYWARN Basic Spotter Training, DC Office of Emergency Preparedness. Underground secured parking available.
Contact: Dave Drysdale - N3JGL (202) 291-3838 or NWS (703) 260-0107 before 5 p.m. Preregistration required.
Instructor: Melody Hall |
| Friday, May 22 | 7-10 p.m. SKYWARN Basic Spotter Training (part II), Vienna Wireless Society, Vienna Community Center (Park Street).
Contact: Dave Rogers - N4JGQ (703) 237-5465 for Information.
Instructor: Barbara McNaught |

THE MARYLAND FM ASSOCIATION, INC.
PROUDLY PRESENTS ITS ANNUAL

MEMORIAL DAY HAMFEST SUNDAY, MAY 24, 1992

AT THE HOWARD COUNTY FAIRGROUNDS
RT. #144, WEST FRIENDSHIP, MARYLAND

TIME: 8 a.m. until 3 p.m. -- premises **MUST** be cleared by 5 p.m.

TALK-IN on WA3DZD/Repeater (146.16/146.76, 223.16/224.76, and 449.0/444.0).

Plenty of good food and drink will be available.

COMMERCIAL DISPLAYS

AMPLE PARKING

DONATION: \$4

Tailgating: \$4

Table rentals (inside):

Paid in advance -- \$15

At the Hamfest -- \$20
(if available)

Only **PAID** table reservations
accepted. If you haven't paid,
you don't have reservations.

For reservations and information, write to:

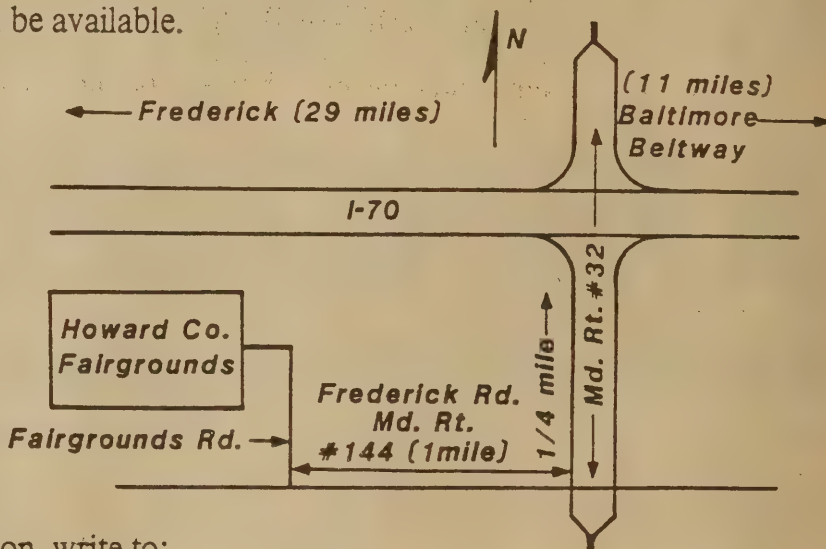
Melvin Seyle (WA3KZR)

15809 Pointer Ridge Drive

Bowie, MD 20716

301-249-6147

Make checks payable to MFMA, Inc.



License examinations: Walk-ins accepted -- **MUST** have a completed FCC Form 610, a copy of existing license, and proof of identification (driver's license, et cetera).
Registration: 8:30 a.m. Exams will start: 9:00 a.m. -- **NO APPLICATION FEE!** Contact:
Les McClure (W3GXT), 516 Gwynnwest Road, Reisterstown, MD 21136 (410-833-8667).

All proceeds will be used for improvements to the Club's WA3DZD repeater system.

Commercial vendors must have proper tax/license certificates available.

All items offered for sale must be Amateur Radio related.

John Kanode, N4MM

TOP OF THE HONOR ROLL

DXCC APPLICATION SIMPLIFICATION

The DXCC Desk has terminated the do-it-yourself records conversion program.

-+-+--+-+--+-+--+-+--+-+--+-+--+-+--+-+

The DX programs conducted this year at the Charlotte Hamfest were the best in years. Some of the DX presentations were the ZA1A story, the recent operation from KP1, Navassa Island and W5UN gave a nice overview of his two meter EME station that got him the first DXCC on two meters. A DXCC/DXAC discussion forum was conducted by Chuck-K8CH; Gary-K4MQG and John-N4MM. Over 80 DXCC applications and endorsements were checked at the ARRL booth. INDXA had received some of the long awaited XY0RR QSL cards and they were passed out at the hamfest. The Charlotte DXers have done an excellent job in getting good DX programs at the hamfest/convention over the years.

DX CONTESTS FOR MAY

May 2-3 ARI International DX Contest
May 9-10 CQ-M- Contest CIS
May 30-31 CQ WW CW WPX Contest

UPCOMING DXPEDITIONS

V4/JA's	Nevis and St.Kitts	April 29- May 3
V63SA	Micronesia	May 2-9
4L6CH	Ukraine	May 1-3



A lively DX discussion taking place in the ARRL booth at the recent Charlotte Hamfest.
L-R Chuck, K8CH; Murph, W4WMQ;

Training Classes

Robert Armstrong, WA4SQL
44 South French Street, Alexandria, VA 22304
Phone (703) 751-2294

Novice and Technician Training Classes, Herndon, VA. Starting September 12, 1992. Sponsored by the Herndon Repeater Group. Classes are free but will be limited to 35 people. For information Contact Mike Weber - WB8RDN at (703) 450-2304 between 7:00 and 9:00 p.m.

Novice Training Classes, Baltimore, MD. Sponsored by BRATS. Classes are being held on an On-going basis every Friday evening at American Red Cross; 4700 Mt. Hope Drive, Baltimore (near Reisterstown Road Plaza Metro Station). Class is free; Materials (which you can keep) consist of a book and tape and cost \$19.90. For registration or information, contact Al Dixon - N3HOE (301) 833-5735.

Novice Training Classes, N.W. Washington, DC. Sponsored by MADRAS. For more information contact Larry Zeichek - N3GKZ (301) 984-6112.

VIRGINIA TRAFFIC TRAINING NET - 3685 kHz 6:30 p.m. daily. 5 - 8 wpm.

SLOW CODE PRACTICE NET, 28.250 MHz 7:00 to 8:00 p.m. Wednesdays. Sponsored by Woodbridge Wireless, Inc.

Please keep Auto-Call advised of Training Classes

GENERAL INFORMATION

Alexandria Radio Club	John Forrest - WZ4A (703) 971-2905
Anne Arundel	Tony Young - WA3YLO (301) 262-1917
Arlington ARC	Fred Bardsley - WD4DHW (703) 533-0372
Baltimore ARC	Phone 1-800-HAM FEST - VB
BRATS	Al Dixon - N3HOE (301) 833-5735
Chaverim, Inc.	Bob Teitel - W3IDT (301) 654-3484
Fauquier ARC	Bill Mills - KC5PF (703) 937-4090 (H), 818-3955 (O)
Frederick ARC	Steve Bauman - W3FOA (301) 662-4552
Herndon Repeater Group	Michael Weber - WB8RDN (703) 450-2304
Laurel ARC	Pud Reaver - W3DQI (301) 498-6293
MADRAS	Larry Zeichek - N3GKZ (301) 984-6112
Maryland Mobileers	John Baugus (301) 551-3161
Montgomery ARC	Ken Nichols - KD3VK (301) 977-5405
Mount Vernon ARC	John Forrest - WZ4A (703) 971-3905
NASA/Goddard ARC	Vikki Gigante - KA3PVS (301) 249-2609
Ole Virginia Hams	John Fritsch - N4YOB (703) 791-5995
Pentagon ARC	David Boyd - K9MX (703) 756-1817
Rock Creek ARA	Walt Ramsey - AK3B (301) 949-3954
St. Mary's County ARA	Call (301) 862-2214
Shenandoah Valley ARC	Guy Black - W4PSJ (703) 722-4952
Southern Maryland ARC	Vic Curtis - WA3YUV (301) 888-1388
Southern Patuxent ARC	Dwayne Kincaid - WD8OYG (301) 586-2177
Stafford Adult Education	Jerry Mullinix - AC4HK (703) 659-3905
Sterling Park	Mark Johnson - WS3N (703) 430-3804
Tri County ARC	Al Sines - WA3QGA, Box 710, College Park 20740
Vienna Wireless	Paul Wilkins - AB4CY (703) 560-2779
Woodbridge Wireless	Loyd Davis - K8EI (703) 360-0248

FOUNDATION FOR AMATEUR RADIO
Volunteer Examiner Cooperative

Nancy Draheim - NK4U
3513 Old Post Road, Fairfax, VA 22030
(703) 691-0078

SCHEDULE OF EXAMINATIONS

NOTICE: If you presently have a Technician class license which was acquired prior to March 21 1987, keep a copy of this license available when you decide to upgrade to General class. It will be your responsibility to prove you are grandfathered for Element 3B (General Theory).

- Apr 29** Maryland Mobileers ARC (Glen Burnie, MD) (Laurel VEC) Pre-registration
Contact: Jerry Gavin, NU3D (410) 761-1423

Timonium Hamfest (Timonium, MD) Pre-Registration Requested
Contact: Les McClure, W3GXT (410-833-8667
- May 1** Southern Maryland ARC (Temple Hills, MD) (Laurel VEC)
Contact: Ray Simpson, WI3A (301) 894-0606
- May 2** Portsmouth ARC May (Portsmouth, VA) (ARRL VEC)
Contact: Art Thiemens, AA4AT (804) 484-2857

University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-ins
Contact: Scott Rosenfeld - NS3I (301) 206-9921
- May 7** Southern Patuxent ARC (California, MD) (ARRL VEC) Walk-in
Contact: Dwayne Kincaid - WD8OYG (410) 586-2177
- May 9** Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083

Herndon Repeater Group (Herndon, VA) (ARRL VEC) Pre-registration requested
Contact: Mike Weber - WB8RDN (703) 450-2304.

Mount Vernon ARC (Alexandria, VA) (Laurel VEC) Walk-in
Contact: Frank Mackey, N4GUS (703) 455-1510

Richmond, VA (ARRL VEC)
Contact: Rick Cook, AB4U (804) 798-5048
- May 12** Maryland Mobileers ARC (Annapolis, MD) (Laurel VEC) Pre-registration
Contact: John Kohl, KO4A (410) 757-8148
- May 16** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- May 20** Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC)
Contact: Bill Runyon, N4BDH (804) 487-8611
- May 24** Maryland FM Association Hamfest (Howard County Fairgrounds) Pre-registration
Contact: Les McClure, W3GXT (410) 833-8667
- Jun 6** Virginia Beach ARC (Virginia Beach, VA) (ARRL VEC)
Contact: Ed Robison, WD4GOY (804) 468-0866

Volunteer Examiner Cooperative - Continued

- Jun 13** Anne Arundel Radio Club (Davidsonville, MD) (LARC VEC) Walk-in
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Mount Vernon ARC (Alexandria, VA) (Laurel VEC) Walk-in
Contact: Frank Mackey, N4GUS (703) 455-1510
- Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Walk-in
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)14
- Ole Virginia Hams ARC (Manassas, VA) (ARRL VEC) Walk-in
Contact: Harry Vorhauer, W4PVA (703) 368-6050
- Jun 20** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Jun 22** Southern Maryland ARC (Temple Hills, MD) (Laurel VEC)
Contact: Ray Simpson, WI3A (301) 894-0606
- Jun 24** Maryland Mobileers ARC (Glen Burnie, MD) (Laurel VEC) Pre-registration
Contact: Jerry Gavin, NU3D (410) 761-1423
- Jul 11** Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Chesapeake DX Assn. (Chesapeake, VA) (ARRL VEC)
Contact: Bill Verebely, KC4YX (804) 424-4764
- Jul 18** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- George Washington U/Department of State (Washington, DC) (ARRL VEC Limited Walk-in
Contact: Derrill Rohlf, W3WOX (301) 620-1727
- Jul 28** Maryland Mobileers ARC (Annapolis, MD) (Laurel VEC) Pre-registration
Contact: John Kohl, KO4A (410) 757-8148
- Aug 1** Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC)
Contact: Bill Runyon, N4BDH (804) 487-8611
- Middletown VE Team (Middletown, VA) (ARRL VEC) Limited walk-ins
Contact: Walt Quitter, NC4B (703) 869-5241

If you presently have a Technician class license which was acquired prior to March 21 1987, keep a copy of this license available when you decide to upgrade to General class. It will be your responsibility to prove you are grandfathered for Element 3B (General Theory).

NOTE: All examinations require that you submit:
Copy of your current Amateur Radio license (bring original)
Completed FCC Form 610.

Check for appropriate examination fee.

Fees of individual VEC may vary.

ARRL VEC Exam fee is \$5.40

W5YI VEC Exam fee is \$5.40

Laurel VEC Exams, all tests are free.

Mountain VEC Exams, all tests are free

This schedule of examinations appears each month in Auto-Call Magazine
Sponsored by the Foundation for Amateur Radio

Elmer's Corner

By Scott Schaefer - WR4S

This column will be devoted to guiding new Amateurs through some of the common questions and problems encountered by all of us in our hamming endeavors. Many of the questions that come up regard the virtual plethora of equipment that is available on the market. I plan to give a brief synopsis on what's out there and what are the best buys for a new Amateur. I will also try to help out on problems pertaining to setting up a station. Send us your questions and we will try to provide the answers. Any input that might be helpful to newcomers will also be most welcome.

Write or phone me at 107 Melody Lane S.E., Vienna, VA 22180 (703) 255-7264

I think this month we may finally finish our project of soldering a PL-259 on to a piece of coaxial cable, I hope. So far we have discussed the different types of coax and connectors suited for various hamming applications and also touched a little on the "art" of soldering. Let's try and put all of these together. I'm going to assume that you now are all experts on preparing the coax for soldering and have the end of your piece of coax cut properly. For this project I will be talking about mini-8 (RG8X) type coax so we will need to use a reducing adaptor. Of course, I don't have to mention sliding the coupler and the adaptor up the coax first before you start, do I? I didn't think so.

Now, slide the insert up so the front edge is even with the end of the outside jacket of the coax and fan the braid out, back and over the insert, pressing it down with your fingers. Make sure that none of the "braid hairs" will end up binding in the thread when the body of the PL-259 is screwed onto the insert. By twisting the center conductor between your fingers it should easily slide through the hole in the connector tip when you are ready to do this. Now is the time to "tin" the center conductor by heating it up and flowing a small amount of solder to it. If you used too much, heat it up again and remove the excess. The body of the PL-259 should be screwed onto the insert until tight, with the center conductor emerging out through the hole in the tip of the PL-259.

TIP TIME. . . . Make sure that the PL-259 is not in a vertical position when soldering is attempted. Sometimes the solder will flow down into the body of the PL-259 and short

out. Have the PL-259 horizontal (on its side for you Extra Class hams) and this problem can be avoided.

Apply heat to the top of the PL-259 and the center conductor until the "tinning" solder starts to melt, then apply some new solder until the hollow tip of the PL-259 appears full.



Remove your solder and iron and allow the work to cool. At this point, make sure that the work remains motionless so as to not create the infamous "cold solder joint." If the materials being joined together are soldered properly an "alloy" of the solder and the materials is produced at the joint. Don't think of solder as a type of glue; the "alloying" process is what produces a good electrical connection. If movement occurs while the solder is in its "plastic" state (the solder is neither solid or liquid but in a plastic transitional state) this "alloying" may not occur and the resulting joint will be unacceptable even though it may look fine. If you're not sure, simply heat up the joint again and let it cool, this time keeping it still!

If you are satisfied the center conductor has been soldered properly, its time to look at soldering the braid that you can see through the 4 small holes in the body of the PL-259. This is the difficult part of the process and many hams (including my lazy self) have ignored at one time or another. For a temporary application its ok but over the long haul, and especially for "weather exposed" applications, soldering the braid is a necessity.

How can anybody talk so much about something that, once you know how to do it, only takes a few minutes to do? Well, at least we are half way to our goal. We will finish next month sure.

Silent Keys

Walt Starnes - N3GOE passed away on March 25. He was a past member of Metrovision and was a current member of the Southern Maryland Amateur Radio Club. Walt, who was in his early 70s, lived in Greenbelt, Maryland and is survived by his wife, Helen.

Submitted by Dick Logan - WB3EPX

Lloyd Penrose - NC8G of Inwood, WV became a Silent Key last month. He was active in public service events and enjoyed his fellowship in the Shenandoah Valley Chapter of QCWA.

(Submitted by Walt Johnson - WA4HVU)

Beatrice Grenfell, wife of Bill Grenfell - W4GF passed away at Iliff Nursing Home on February 29 after an extended illness. Our condolences to Bill.

The 15th Annual Wheeling Hamfest and Computer Fair

Sunday May 17, 1992 - 8:00 am To 3:00 pm
White Palace - Wheeling Park
Wheeling, West Virginia

ADMISSION - \$2.00 IN ADVANCE - \$3.00 AT THE GATE
ALL WOMEN AND YOUTHS 17 YRS OLD AND YOUNGER - **FREE**

AN ARRL APPROVED HAMFEST INCLUDING

2 Restaurants on the ground	Free Overnight Self-Contained RV Parking
Unlimited Free Parking on Asphalt	Clean restrooms - fountains
Minimal Dealer Tables/Space Charges	A Security Policed Hamfest
Family Hamfest - Paddle Boats, Picnic Sites, Golf, Tennis, etc.	
6 Acres available for Flea Markets FREE for price of Admission	
36,000 sq ft Dealer Area Under Cover - Rain or Shine	
Special Computer Setup - Clubs and Allied Equipment	
VHF Communications - TSRAC Featured Dealer	

For Information and Advance Tickets - Contact:
The Triple States Radio Amateur Club (TSRAC)
Box 240, RD 1 - Adena, OH 43901 - Phone (614) 546-3930

West Virginia's Largest and Best Hamfest
The One Hamfest You Don't Want to Miss !

SRAM - 041

(Soviet Radio Amateur Movement)

Edited by Dexter Anderson, W4KM

"SK" dated 1 June 1991 beginning on page 8:
"THE FINEST HOUR [literally THE STELLAR HOUR] OF SERGEY MATVEYEV,
which was wrapped in two years of 'chemistry'"
by Yevgeniy Chapurin

[Second of two-part summary translation of an article on an outspoken amateur who "did time" on trumped-up charges under the old régime. The first part began with Sergey Matveyev, UA1OSM, sending out an "SOS" message that was copied by Jack Gutzeit, W2LZX. The message stated that UA1OSM was being closed down for political reasons. The rest of the first part related how things got to that point. As the first part ended, the authorities had found a pretext for not issuing Matveyev's annual license renewal and ordered UA1OSM closed down.]

[Comments appearing in square brackets are by the translator.]

THE SYSTEM BEATS PAINFULLY

The events that followed are reminiscent of a trite plot from a Western [movie]. Sergey and his father went hunting in Konosha for the May holidays. Meanwhile, an anonymous letter was received by the Department of Internal Affairs in Arkhangel'sk. It stated that Matveyev had a small-caliber rifle. Our militia exhibited wonders of zeal. Sergey Matveyev was locked up in Konosha. No rifle was found, but his father had an unregistered firearm, for which he later got a one-year suspended sentence. Sergey was released. Back home in Arkhangel'sk, he found his apartment had been searched. Again no rifle had been found, but all his radio equipment had been confiscated. He also found a summons to a hearing with an investigator. [The investigator (sledovatel') is in charge of the first phase of a criminal proceeding.]

On his way to the hearing, Sergey wondered what sort of criminal charges could be brought against him. Would they show him a home-made hunting knife that he kept at home? Or a dollar with which they would cook up a charge of foreign exchange machinations? Matveyev was relieved when all they accused him of was illegal use of the radio school stamp [for franking envelopes containing QSL cards] to avoid paying postage. "But this isn't serious, comrade investigator, many people do the same thing and no crime is found ..." But the investigator probed thoroughly in accordance with all the rules of Soviet jurisprudence. It was clear that he did not share Matveyev's optimism.

Soon a trial was held, Matveyev's crime was proven in full, and he was sentenced to two years of "chemistry" in accordance with article 195 and 196 of the RSFSR Criminal Code. By the way, during the trial the defendant asked one of the witnesses whether anyone else in the radio school used the stamp illegally to send mail. "They did use it," the witness replied honestly. "The chief used it, as did others."

Based on common sense, to what degree did Matveyev's punishment match his offense? An instruction published by the DOSAAF Central Committee in 1983 stating that illegal use of a stamp to send mail was nothing more than a minor administrative infraction, punishable by depriving the amateur of the right to send cards free of charge for half a year. But the train had already left.

SRAM-041 - Continued

A different train altogether took Sergey Matveyev away to Plesetskiy Rayon to serve out his punishment. Matveyev would like to erase these two years from his life. It's hard for those who have never been there to imagine the customs of "chemistry." When drunken voices wake you in the middle of the night to play cards. Or when the whole barracks gets tanked to the rafters and mass investigations are held.

An experienced "con" advised Sergey right away: "You're here by accident, so don't hang around the barracks, go off somewhere, otherwise you'll attract attention ..." Sergey accepted the advice and evenings disappeared into the library, returning just before retreat. A great unpleasantness happened to him because of the library. A book disappeared there, and those in charge thought of Matveyev because who else frequents libraries? True to his reputation as a "chemist-intellectual," he candidly denied the suspicion. Retribution followed promptly: The same night Sergey was severely beaten and his spine [pozvonochnik] was broken.

Fortunately, the injury was not hopeless. After treatment, the chief of the special command told him: "You, lad, got off lightly, and they don't forgive that in 'chemistry.' Now I can't vouch for your life ..." But the chief's prediction didn't come true and from then on the "chemists" simply snubbed him. The reason is shrouded in darkness. Perhaps because Sergey didn't name those who had beaten him, perhaps because of a visit he made to the KGB administration asking to be left alone.

EVERYTHING ENDED NORMALLY

"Matveyev is the type of person who is always writing and writing," states a worker at the Arkhangel'sk Telecommunication Inspectorate. "As if institutions had nothing better to do than answer his scurrilous writings. They sent him to prison for something and it will be a lesson for others ..."

Matveyev does in fact write a lot. He keeps an already heavy file at home, marked "Attempts at Rehabilitation, 1983 - 1990."

"And I'll keep writing, because I believe I was punished unjustly ..."

It has already been admitted by the Central Committee of DOSAAF USSR that Matveyev's radio station was closed in 1981 without objective reasons. An authoritative commission came specially to Arkhangel'sk, investigated, and concluded that the station was closed for political reasons. And since yesterday's anti-Soviet views are recognized today, under perestroika, as [merely] sharply critical, Sergey Matveyev is just a restless person.

Matveyev considers his last years as senselessly squandered.

"Oh, if I had only known how things would turn out, that in '85 Gorbachev would come to power! I would simply have kept quiet and would simply have waited out the few remaining years ... I would have done one thing and thought another. But I took the bit in my teeth because there was a kind of hopelessness, and it seemed that our idiocy would last forever ..."

And yet ... Recently, Sergey spoke on the air with Jack Gutzeit, W2LZX, one of those who had received his "First of May" radio message.

"Jack," said Sergey, "you know this is the biggest thing I've been able to do in this life. I consider this my finest hour. No matter what."

With uncharacteristic American sentimentality, Jack replied:

"But you know, Sergey, those minutes on the air became the main event in my life too. It was as though I could see the bird of freedom fly out of its cage."

ROANOKE MAYFEST '92

HAMFEST AND COMPUTER SHOW
SATURDAY, MAY 16, 1992

LANCERLOT SPORTS COMPLEX

VINTON, VA

AN APPROVED ARRL EVENT

PRESENTED BY

THE ROANOKE VALLEY AMATEUR RADIO CLUB

TALK-IN ON 146.985 (-600) & 442.50+



TICKET INFORMATION

General Admission- Preregistration \$5.00
At the Door \$6.00

COMMERCIAL DEALER SPACES

1 - 8 ft. table (includes 2 chairs) \$20.00
Each additional table \$20.00

***Non-Commercial exhibitor must also purchase General Admission Ticket.**

INSIDE FLEAMARKET TABLES

1 - 8 ft. table (includes 1 chair) \$10.00

PRICE FOR ELECTRICAL HOOKUP \$15.00

OUTSIDE TAILGATE SPACE \$5.00

PREREGISTRATION DEADLINE MAY 9, 1992.

PLEASE SEND S.A.S.E.

DEALER SET-UP: Doors open for set-up Friday, May 15th, 4-10 p.m. and Saturday, May 16th at 6 a.m.

WRITTEN CORRESPONDENCE: **Mayfest '92,**
P. O. Box 2002, Roanoke, Virginia 24009

FOR DEALER INFORMATION contact:

Charlie Nichols, KB4WSB Home (703) 342-8562
Work (703) 345-1404

FOR FLEA MARKET INFORMATION contact:

Doug Moore, K4WVS Home (703) 343-6794
Work (703) 342-8513
FAX (703) 342-1250

If you have any questions, concerns or need more detailed information, please do not hesitate to contact us.

SHOW HOURS: 9:00 A.M.- 4:00 P.M.

1992 HAMFEST PREREGISTRATION FORM

Mail check, S.A.S.E. and this completed form to:
R.V.A.R.C., P. O. Box 2002, Roanoke, Virginia 24009.
WE MUST RECEIVE THIS BY MAY 9, 1992.

NAME: _____ CALL: _____

ADDRESS: _____ PHONE: _____

CITY: _____ STATE: _____ ZIP: _____

I would like _____ Hamfest Tickets @ \$5.00 each \$ _____

Reserve _____ Commercial Dealer Spaces @ \$20.00 each \$ _____
(1 - 8 ft. table, includes 2 chairs)

Reserve _____ Each Additional Dealer Table @ \$20.00 each \$ _____

Reserve _____ Inside Fleamarket Tables @ \$10.00 \$ _____
(1 - 8 ft. table, includes 1 chair)

Reserve _____ Outside Tailgate Space @ \$5.00 each \$ _____

Reserve _____ Electricity Hookup @ \$15.00 \$ _____

Make checks payable to R.V.A.R.C. **TOTAL \$** _____

Guest Editorial

It Ain't Broke And it Don't Need Fixin'

The ARRL and Fred Maia (W5YI), in an effort to fix something that is not broken, have separately petitioned the FCC to incorporate the Novice Amateur Radio test into the same Volunteer Examiner (VE) system presently being used for all other license classes. There is nothing wrong with our present system of allowing any two hams to administer the Novice test – just as long as they hold General class or above licenses and are not related to the candidate.

In many rural areas, and in a surprisingly great number of urban areas as well, it is hard enough to find just two General class or higher hams to administer the Novice test; but it is much more difficult to find a VE testing session. I feel that the present Novice testing procedure should be retained because it provides many more opportunities for testing sessions than the limited number (and often inconvenient location) of VE tests. Incorporating the Novice test into the VE system would be acceptable if it were in addition to our existing Novice testing procedure, so that the new Novice VE testing system would *supplement* the existing one instead of replacing it. Otherwise, we run the risk of destroying this traditional entry level for new hams by making it overly difficult to find and travel to a VE testing session.

Another problem with VE testing is there is an FCC requirement for the VE team to publicly announce all testing sessions in advance. This completely eliminates any spontaneous testing of just one single candidate, even if you could find three VEs to give him the test. The net result will be less availability of test opportunities for Novices.

The FCC intends to issue a Notice of Proposed Rule Making later this year, with a 60-day public comment period. Whether or not you support the petition, I believe that you should write the FCC and ask them to keep the Novice test free of all VE fees, just as it is now.

Steve L. Karty - N4UHO 3/12/92

Guest Editorials are accepted as expressing the opinion of the writer.

Auto-Call Survey

With the recent increase in new features in Auto-Call and the number of club reports increasing every month, we are starting to run short on space. We can't increase the number of pages without going into a new postage category, so we may have to cut back on the amount of space given to some features. We would like to have our readers indicate which items are most popular and which are the least read.

Which columns should be retained at the present length - or even expanded?

Which columns should be cut back - or even eliminated?

What new features should be added - if space is available?

What can we do to make Auto-Call more interesting and appealing?

We will sincerely appreciate your comments. Auto-Call is **YOUR** magazine and we are anxious to provide the kind of magazine **YOU** want.

Please let us hear from you.

Write to the Auto-Call Editor, PO. Box 7612, Falls Church, VA 22040

JOIN HAYMAN

We are looking for former customer service electronic field technicians, teachers, college students, restaurant managers, retail store managers, and real estate sales people to join our firm as:

Trainers, programmers, technicians, and sales agents.

Please apply if you have:

- PC-DOS experience
- Hardware and application software experience
- Good communicating skills
- High energy
- A desire to work hard (we provide service all day, everyday)
- A desire to learn new skills
- Good trouble shooting & problem solving skills
- A strong interest in technology & business

We have entry level positions open at this time for sales agents, programmers/trainers, and shop/field service representatives. A late model auto is required for much of your time will be spent with customers & prospects.

Background: Hayman Business Systems is a successful medium size company which was started in 1938. We sell and service electronic point-of-sale terminals and computer systems which we have installed throughout the Washington DC / Baltimore / Northern Virginia area. Our customers range in size from the corner carry-out shop to major chains. We are growing and moving to **Laurel, Maryland** before the end of this summer.

Fax or Mail your resume:

HAYMAN BUSINESS SYSTEMS

Mr. Richard Hayman, President
4406 Georgia Ave., NW,
Washington, DC 20011.

Fax: 202-723-7760

Foundation For Amateur Radio Ham of the Month

Charles Anderson - NF3X

Charles Anderson - NF3X, has been very active in ARRL and SKYWARN activities. He is ARES Washington County Emergency Coordinator (EC), and ARRL Assistant Technical Coordinator for the MD-DC Section of the Atlantic Division. He is a Director in the Maryland Emergency Phone Net (3929 kHz daily at 6:00 p.m.) and assists in the Antietam Radio Association Hagerstown training classes. He also conducts SKYWARN classes and coordinates Severe Storm Weather Watches. He has been very active in the Shenandoah Valley Chapter of QCWA and was recently presented with the QCWA Meritorious Service Award. He has also served as EC in Monmouth County, N.J. and in Orange County, Florida.

A native of Baltimore, Charlie graduated from Washington College in Chestertown, Maryland. That college is the 10th oldest in the country, being founded in 1782. He was first licensed as an Amateur Radio operator in 1933. He now holds Extra Class license. He also held commercial Radiotelegraph 2nd Class and Radiotelephone 1st Class operator licenses.

From December 1940 to 1960, Charlie worked for Glen L. Martin Company (later called the Martin Company) in Baltimore, working on aircraft and missile programs including the B-61 Matador Missile. In 1960-1961 he worked for Boeing Company in Seattle on the Minuteman Missile Program. He was with Grumman Aircraft Company in 1961-1964, working on the lunar excursion module, and then was in communications security work at Ft. Monmouth, N.J., and Honeywell and American Electronic Laboratories (AEL) before he retired in early 1987. He says his present hobbies include reading, ham radio and hiking. He and his wife, Mary, are members of the Appalachian Trail Conference.

Charlie continues to be involved in everything going on in his area in Amateur Radio. He has contributed much to the hobby and to the electronic industry. It is a pleasure to nominate Charles Anderson - NF3X for Foundation For Amateur Radio **Ham of the Month**.

(Submitted by Walter Johnson - WA4HVV and Lewis Danes - W3FZT)

Field Day Sites

Next month we would like to run a list of Field Day Sites where newcomers and visitors may see Amateur Radio in action. Please advise Auto-Call of the dates and locations where you will be holding Field Day activities.

PRESENTLY KNOWN LOCATIONS

Arlington Amateur Radio Club & Alexandria Radio Club - Probably Ft. Ward Park
For information contact Bob Milligan - KI4MB (703) 533-0650

Herndon Repeater Group - Lake Fairfax Park in Reston, Group Campground
For information contact Bill South - N4WJN

Vienna Wireless Society - Burke Lake
For information contact Margy Patterson - N2JRG (703) 620-1727

FAR/QCWA

Spring Banquet

For ALL Area Amateurs

Sunday May 10

**Martin's Cross Winds
Greenbelt, Maryland**

Speaker:

John Simpson

1991 Director of the Secret Service

MAKE YOUR RESERVATIONS EARLY

Table assignments are made in the order in which reservations are received

Early applications take the best seats

Club or Group seating is available

Deadline for Reservations is May 5

ADVANCE RESERVATIONS

\$20 per person

(\$22 at the Door without Reservations)

CASH BAR OPENS AT 6:30

DINNER WILL BE AT 7:30

Make remittance payable to
Foundation For Amateur Radio
Mail reservations to

Tony Young - WA3YLO, 2016 Long Ridge Lane
Bowie, MD 20715 Phone (301) 262-1917

See reverse side of page for registration form and more details

Goddard Radio Club

WA3NAN

- Meetings:** Third Wednesday of the month at 5:00 p.m. Goddard Radio Club Station, Soil Conservation Road, Greenbelt Maryland, across from the Soil Conservation Road gate of the Goddard Space Flight Center. This road may be accessed from either Route 193, Greenbelt Road, or Powder Mill Road.
- Repeater:** 146.835 MHz
- Net:** Information net every Thursday evening at 9:00 p.m. local time.
All Amateur Radio operators are welcomed.
- Information:** Chuck Sommer - N4OSD (301) 794-3280 or
Vikki Gigante - KA3PVS (301) 249-2609
-

Another successful shuttle mission is behind us. The mission of STS-45 turned into an eight day, 24 hour a day mission which was covered completely by our dedicated team of shuttle retransmission operators. Once again, Joe Grzesik and Dave Gossard provided our overnight support for the entire mission. Our daytime operators included Frank Turano, Tony Young, Bill Graettinger, Al Nollmeyer, Hugh Turnbull, Bill Count, Margey Patterson, Dave Black and George Dewees. Even the weekend shifts were covered completely, quite a feat since this was the Hamboree weekend. John Gainsborough, Jim Gass, Pat Kilroy, Gary Anderson, Bill Boston, Dean Charlson and Rich Zwirko comprised our weekend cast of characters and I understand they had quite a bit of support from new operators who are learning the ropes. These included Jim Blackwell, John Klotz, Ken Nichols, Tom Smith, Ed and Eddie Kabic and Tony Colella. Our evening operators included but were not limited to Jeff Nucciarone, Bill Boston, Bill Onuska, John Gainsborough, Gary Anderson, Mark Steiner, and John Baugus with the accompaniment of Jeff Salamon. Of course, there are our two early morning shifters who vie for the time each mission. Carolyn Keydash and Hugh O'Donnell fought it out for who could be in at the earliest time each morning. We'll have to ask Joe G. for a ruling. Then there is John Stolarik who is our fill-in person. It is called if there is a vacant slot, John tries to fill it and a great job he does! Thanks to all and to Pat Gossard for keeping up the food supplies throughout the mission.

This mission was a record one for wear on rigs, we lost three during the mission but they were deftly and correctly repaired by the team of Jeff Nucciarone, Al Nollmeyer and Bill Graettinger, not to mention Dave Gossard.

All in all, it was quite an exciting mission and boy, did you all go out of your way to let us know you were listening. We received more phone calls this mission than we ever have, I wonder if SAREX had anything to do with this! Thanks for letting us know you're out there. The homeschool tour was also very enlightening. Hopefully we'll get some new Amateurs out of that group.

The Maryland Mobileers paid us a visit on Wednesday, March 25 and got a full view of how shuttle retransmission actually works. We gave them a thorough tour and now they know that we don't have the most modern equipment, but with rubberbands and baling wire, we keep it all together. It was great having the guys down to see the station!

Our next mission is May 9, STS-49, the maiden voyage of the Endeavor. This will also be the Intelsat reboost mission which will involve a couple of spacewalks while they are trying to move the satellite into a different orbit. This will be a seven day mission.

To all of you who are always asking about the shuttle retransmission frequencies, we now have coffee mugs with the frequencies on them. They are lovely white mugs with black writing on them and a picture of the shuttle on the front. These lovely mugs are our latest fund raiser. If you would like further information on them, please contact Chuck Sommer at (301) 286-6790 or Vikki Gigante at (301) 249-2609. Otherwise, we'll see you on the hamfest circuit this summer.

If you are interested in a tour of the club or in shuttle retransmission, please contact either Chuck or Vikki at the above numbers. Thanks for your support.

Vikki - KA3PVS

Southern Patuxent Amateur Radio Club

Meetings: 2nd Wednesday of each month at 7:00 p.m.
Southern Community Center, Lusby, Maryland

Nets: RACES Tuesdays at 7:15 p.m. 146.985 Repeater
RACES 2nd Tuesday at 7:00 p.m. 147.195 Repeater
Phone Net every Thursday at 8:00 p.m. on 28.410
Swap N Shop every Wednesday at 9:15 p.m. on 28.410

Repeater: W3ZNW 146.985 (out)/146.385 (in) Sunderland, Maryland
N3JTG 147.195 (out)/147.795 (in) Leonardtown, Maryland
N3AGB/R 443.30 (out)/448.30 (in) St. Leonard, Maryland. Autopatch for members.

Address: 1445 Parran Road, St. Leonard, Maryland 20685

Information: Jay McClain - N3HUH (301) 994-2133 or
Dwayne Kincaid - WD8OYG (410) 586-2177

RACES drill started in St. Mary's county on the new 147.195 repeater last month. Jay McClain - N3HUH reported 10 check-ins and 4 participants at the first drill. Jay also operated a link to the 146.985 RACES net simultaneously from the EOC without interference. S. Patuxent members will install a new IC-229H at the EOC this month to allow local simplex and distant repeater operation from the repeater site.

The Winter Novice/Technician class has 41 students registered. Twenty-three have already passed the Novice theory and code. Now we have to start looking for radios for the new hams. A General "theory only" class started April 9 at the same location. Another VE session is planned for May 7 in California, Maryland.

The special event station at Calvert Cliffs Nuclear Power Plant was a complete success. Bob - N3IFL set up the special event that made over 175 contacts during the 8 hours from 3 full-time stations. Over 60 people were on hand or visiting the stations. This was the start of an annual event that will include many Nuclear Power Plants from around the country. About 12 stations nationwide were set up at Nuclear Power Plants this year.



*Bob Smith - N3IFL and Group at the Calvert Cliff
Nuclear Power Plant Special Event*

The date was finally set for the 2nd Annual Southern Patuxent Hamfest in Upper Marlboro this year. It will be August 16 and has already received ARRL approval. This year's hamfest will again be "all outdoor" and include mostly tailgaters. The hamfest committees have already met to make improvements from last year's 'fest.

Mike Markowski introduced a local Worked All States contest. The contest is based on teams of four that try to be first in contacting all 50 states. The team must include at least 2 Novices or Technicians. Awards will be presented to the first team to reach 50 states at this year's Field Day. Currently, 6 teams have been signed up.

New members this month include: Bob Anderson, Bob Carter, John Johnson, Ray Samuel, Craig Kinman, Chet Briggs and Harry Price.

Southern Patuxent ARC will conduct ARRL VEC exams at California, MD on May 7. Pre-registrations are desirable but walk-ins are welcome. Contact WD8OYG at (401) 586-2177

Dwayne - WD8OYG

AMRAD

Amateur Radio Research and Development Corp

Meetings: Second Thursday of each month, Fairfax County Library, McLean, Virginia
Repeater: WD4IWG 147.81 MHz in, 147.21 MHz out. Director, Jeff Brennan, WB4WLW
WD4IWG is an open repeater for FM voice and digital communications, especially for experimental modes. Autopatch available to members.
Data Address: CompuServe/Micronet number [72345,1050]
AMRAD CBBS: (703) 734-1387 Operated by Lawrence Kesteloot - N4NTL
E-Mail address is lkestel@muvox2.gmu.edu
Information: Andre Kesteloot - N4ICK (703) 356-5519 or Terry Fox - WB4JFI (703) 698-7612

For the March AMRAD meeting, Dave Borden - K8MMO spoke on the design and construction of a home seismograph using a laser and a digital signal processing (DSP) board designed and built by AMRAD members. The DSP is used to process the data and display the graphs on an IBM-clone. Dave repeated the talk the following evening for the Vienna Wireless Society.

AMRAD supports two BBSs: The AMRAD BBS (703) 734-1387 accepts calls at 300, 1200, and 2400 baud. Data path settings are 8 data bits, 1 stop bit, no parity. The Handicapped Educational Exchange (HEX) BBS is operated by Dick Barth - W3HWN. HEX accepts TDD/300 baud at (301) 593-7033, and 300/1200 baud at (301) 593-7357. ASCII is 8N1.

Current Activities: We have located some surplus 4-GHz receivers which may be useable on the 3456-MHz or 5650-MHz Amateur band. These have stable oscillators, band-pass filters, and quality IF amps. We hope to have some new microwave equipment on the air soon.

Upcoming Activities: Now that warmer weather is almost here, thoughts are turning to outside activities on top of high mountains looking for elusive 10-GHz signals over a

100 mile path. A basic 10-GHz system requires a microwave source, a 30-MHz IF, and a 7-10 volt DC power supply, a modulator, and an antenna (dish or horn). An article on modifying the Radio Shack AM/FM Flavor radio for use as a 30-MHz IF will be published in the next AMRAD Newsletter.

Anyone interested in any of our projects or technical topics, drop by one of the meetings (see masthead), or join us for lunch. We meet every Saturday @ 120 hrs., at Taco Rio Grande on Rte. 123 in Vienna. AMRAD repeater for talk-in.

Up-Coming Activities: The public service season is upon us, and several events supported by AMRAD members and the AMRAD portable repeater, are scheduled:

May 16-17 MS 150K Bike Tour
May 30-31 100-Mile Run, Fort Valley, VA
Jun 13-14 OD 100-Mile Endurance Ride, Fort Valley, VA

Volunteers are needed for all these events, especially people in the Shenandoah-Warren-Frederick Counties area. I am very much in need of some person/people to take over the events in Shenandoah County. Contact Dave Rogers - N4JGQ @ (703) 237-5465.

Dave - N4JGQ

Earthquake Monitoring

Research is being done in experiments that record low frequency electromagnetic disturbances associated with earthquakes. Vincent Migliore, Editor of *Geo-Monitor* in Santa Clara, California, CA, is trying to collect data on and stimulate Amateur experiments aimed at monitoring ultra-low frequency (ULF) phenomena that may be associated with earthquakes.

Fortunately, the Washington area is not earthquake prone, but if you are interested in this project, Migliore would like to hear from you. The address is: Vincent Migliore (no callsign indicated), 65 Washington Street #400, Santa Clara, California 95050

Metrovision Amateur TV Club

FAST SCAN - COLOR - ATV

Meetings: Quarterly: Call for next meeting time and place.
Repeater: WA9GVK/4 (Video and Audio) 425-431 MHz in; 438-444 MHz out
Also accessible on 144.970, simplex, audio.
On-the-air: Sundays at 8:00 p.m.
Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, VA 22041
Information: Sam - N3GHY (301) 630-3373
Dick - WB3EPX (301) 439-8135

We regret to inform you of the passing of our friend and colleague Walt Starnes - N3GOE on March 25. He was a past member of Metrovision and was a current member of the Southern Maryland Amateur Radio Club. Waalt, who was in his early 70s, lived in Greenbelt, Maryland and is survived by his wife, Helen. Walt was a generous contributor to Metrovision and we will all miss him.

The first Metrovision meeting for 1992 was held on March 12 at the QTH of Dick - WB3EPX. We had fourteen members and friends in attendance, including our newest member Bob - KD3EP and his wife, Marilyn. Bob - KC3VO demonstrated his new 100MHz ATV downconverter and transmitter and Jim - KA4CKI passed out NTSC oscilloscope graticules to all in attendance, in order to help

them adjust their ATV transmitters for the best possible pictures through the Metrovision repeater. We all appreciate the work that Jim put into this project.

We want to thank Bruce - WA9GVK and Jim - KA4CKI for making some adjustments on the repeater. We now have about 35 to 40 watt output. Jim also provided an 18 watt amplifier for the 2-meter audio link for the 400 MHz repeater.

Metrovision now has an informal ATV net on Wednesday evenings at 8 p.m. All of our members and friends are invited to join in.

Below are some pictures from the March meeting.

Dick - WB3EPX



Frank Sam Warren
WA3ZAR N3GHY N4WMU



Bob - KD3EP and Wife Marilyn

Mt. Vernon Amateur Radio Club

Meetings: Second Thursday of Each Month, 7:30 p.m. (except December)
Mt. Vernon Governmental Center, 2511 Parkers Ln., Alexandria
Repeater: WD4PDP/R 146.055 input 146.655 output
Nets: Every Tuesday at 8:00 pm (0100 UTC Wednesday's)
Starts on 2-meter then moves to 10-meter on 28.405
Information: Chris Morrow - W4WYL (703)765-5964
Training Classes: John Forrest - WZ4A (703) 971-3905
Mailing Address: c/o Frank Mackey - N4GUS, 8072 Athena St., Springfield, VA 22153

WARM THANKS to Vikki Gigante - KA3PVS and Chuck Sommer - N4OSD of the Goddard ARC for our March program. They discussed their involvement with each shuttle mission and particularly the most recent flight which had several hams on board.

We were very pleased to have visitors Bob Rice, Geoffrey Brock (Harry WA4IST's son), and Chris Grabiell at the meeting. We are very pleased you visited and hope you can come again. WELCOME to many new members: Bob Shuck - KB4ZSS, Robert Jones - KD4JQW, Tom Moyers, Lynn Healey - KD4IZP, and Richard Woodworth - KD4KLJ.

In the March testing session, we had lots of successful test-takers including SEVERAL extras! We're still working out minor bugs in our operation, but all-in-all, the session went very well. WELL DONE to all who got new licenses or upgraded! [Remember, the exams are the second Saturday of each month at Lee District Park in Fairfax County at no charge. Pre-registration (and information) is available by calling Frank - N4GUS at (703) 455-1510. Walk-ins will be welcome. Anyone interested

in being a VE or helping at the exams (you don't have to be a VE to help out) should also get in touch with Frank.]

MVARC's special event on the second weekend in May (in commemoration of Fairfax County's 250th anniversary) is pretty well set now. We will operate both days on several bands at several locations on the original George Washington estate, including a site the public can visit at the George Washington Recreation Center. If you have any Questions, call Kirk - KA4PXX at 780-6092.

Just an update on the newsletter folding party . . . March brought chocolate chip cookies - see what you're missing?!?! Let us know if you want to help. Steve - WB4EEA 780-7248 is the main man, but you can call me too.

Is it really almost Field Day time again? Wow, how time flies...

Maybe we'll see you at the special event station on May 9 or 10; we certainly hope to see you at the regular meeting May 14th.

Marci - KM4VM

World Telecommunication Day

World Telecommunication Day will be celebrated on 17 May to mark the 127th anniversary of the International Telecommunication Union. Founded at Paris in 1865 to rationalize the exchange of telegraphic traffic across national borders, the ITU is the oldest intergovernmental organization in the world. Now headquartered at Geneva, it presently counts some 166 Members. The ITU Radio Regulations define the "amateur service" and the "amateur-satellite service" and contain frequency allocations to these and dozens of other radiocommunication services.

The International Amateur Radio Club at ITU headquarters operates club station 4U1ITU. In recent years, a special callsign has been used during May to mark World Telecommunication Day. The last digit of the anniversary is substituted for the "1" in the regular call. If this is done again in 1992, the call will be 4U7ITU.

Fauquier Amateur Radio Association

Meetings: Second Tuesday of each month, 8:00 p.m. Local. No July or August meetings.
Shadow Lawn Center, Warrenton, Virginia.

Repeater: NZ4N/R 147.165 Mhz out; 147.765 Mhz in.

Digipeater: K4LLQ-5 145.070 Mhz.

BBS: N4YXW-1 145.090 Mhz.

Net: Every Wednesday night at 9:00 p.m. Local, NZ4N/R

First, I would like to thank John Wilkins, KC4SYX, on his outstanding presentation of the Poor Man's Packet modem/software TNC. Not only was the documentation thorough, but his homebrew modem was a sight to behold! There was much interest generated at this program and I was asked to have published the details on where to get the critical parts and circuit board. The original article is from August '91 73 Amateur Radio Today. Any correspondence this author or any author should have an SASE enclosed.

There will be an auction of radio and radio related items at the April meeting. Larry, K4LLQ, will serve as the auctioneer. Remember

to bring all your no longer used equipment so that someone else may be able to get something out of it.

Novice through Technician classes began on Monday, March 16, with Nelson, N4VJW as instructor. The classes begin at 7:00 PM, regardless of what the Fauquier Citizen had to say!

Thank you one and all for allowing me to run March's meeting in Don's and Neil's absence. My meeting minutes for March are somewhat limited because of my divided attention.

See you April 14 at the meeting.

Dan - N3ND

Vint Hill Farms Station Special Event

The Fauquier Amateur Radio Association will operate a special event station, K4LLQ, at the U.S. Army Communications-Electronics Command, Vint Hill Farms Station, Warrenton, Virginia during the Golden Anniversary celebration of this historic citadel of electronic warfare. "The Farm" was originally created as "Monitoring Station No. 1" during WWII to intercept radio transmissions. In 1943, after Allied Intelligence specialists had succeeded in breaking the Japanese Code known as "Magic," a "Farm" Morse Code intercept operator used his lunch break to copy an urgent message relayed in "Magic" from Berlin to Tokyo. It was a detailed report of an inspection tour of German fortifications along the French coast from the Japanese Ambassador. General Eisenhower later credited the information from the "Farm" as a significant contribution to the success of the Allied invasion of Normandy. Today, Vint Hill Farms Station is the Army's Center for Excellence for Research, Development, Acquisition and Sustainment of Intelligence and Electronic Warfare weapons systems. K4LLQ will operate between 1300 and 2200Z 13 and 14 June. SSB - 7232, 14232, 21322, 28432 KHz. CW contact on request. Frequencies may move depending on band conditions. For QSL, send SASE, or for multicolor certificate, send a 9 x 12 SASE and \$3.00 to Fauquier Amateur Radio Association, 500 Hunton Street, Warrenton, VA 22186.



Arlington Amateur Radio Club

Meetings: Third Tuesday of each month at 7:30 p.m.
Arlington Red Cross Chapter House, 4333 Arlington Blvd. (Rte. 50)
Net: Tuesdays (except meeting nights) at 7:30 p.m. on 144.87/145.47 MHz FM
Info: Robert D. Milligan - KI4MB, (703) 533-0650

March Meeting

A key item at the club's March 17 meeting was last-minute planning for the next day's state-wide Red Cross emergency drill, code-named "Hurricane Zelda." Tom - N4BYF said that he, Harry - N4CWP, and Rick - N4ASX would participate, supporting the Arlington Chapter of the American Red Cross, using WB4MJF/R. He said one more operator was needed. [Result?]

The club also approved expenditure of up to \$375 to repair the club's FT-225 all-mode 2-meter transceiver (which has since been accomplished) and up to \$100 to purchase a Daiwa cross-needle SWR meter for it.

We were honored by a visit from Grace Chem, who recently received her license, and Carl Clayton - KC4ZPU, who said he mostly operates HF but uses WB4MJF/R while commuting to and from work and wanted to "meet the faces behind the voices."

Harry - N4CWP, on behalf of the Alexandria ARC, thanked Tom - N4BYF for helping the Alexandria ARC provide communications support for the St. Patrick's Day parade in Alexandria.

President Bob - KI4MB asked Jim - AB4YP to be club Activities Chairman again. Jim accepted.

Erratum

The "John Titus" mentioned in the Arlington ARC report in the April issue of Auto-Call is actually new member John Othitis. My sincere apologies, OM.

Space Cadets

Several members attempted to get their feet wet in space communications since the March meeting. Most successful was Jim - KM4XG, who had a solid mode-A CW QSO with the "robot" on Radio Sputnik RS-10. He also had a mode-A SSB QSO with himself. Mike - NW3V, trying to hear N5WQC aboard the Space Shuttle orbiter Atlantis, heard U8MIR instead, working simplex on the SAREX downlink frequency, 145.55 MHz.

Kudos

to Tom - N4BYF for providing public-service communications support for the Super Cities Walk April 5, benefitting the MS (Multiple Sclerosis) Society. Tom was stationed at Fletcher's Boat House, the half-way point along the route from the Pentagon to Glen Echo. 1,806 walkers participated.

John Kanode to Speak at May Meeting

John Kanode - N4MM, Director of the Roanoke Division of the ARRL, will be the featured speaker at the May meeting of the Arlington ARC (on Tuesday, May 19, at 7:30 p.m., at the Red Cross building at 4333 Arlington Blvd.). Come early - many gather as early as 7 p.m.

Field Day 1992

Mark June 27-28 on your calendar - plan to participate in the joint Arlington ARC/Alexandria ARC outing at Ft. Ward Park - always an adventure!

Mike - NW3V

SERVICE

While U Wait

commodore

64/128/1541/1571 AMIGA 500

Authorized Service Center • In & Out Warranty

10% discount on repair with this ad,

13646 Jelt Davis Hwy.
Woodbridge, VA 22911
491-6502 643-1170
MWF 12 - 8 TT 10 - 5 Sat 10-4

**Virginia
Micro
Systems**

Montgomery Amateur Radio Club

Meetings:	1st and 3rd Wednesdays of each month at 7:30 p.m. Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD. Park underground on G-2.
Repeater:	146.355 in (Rockville & Germantown)/146.955 out (Rockville)
Mailing:	M.A.R.C., P.O. Box 611, Gaithersburg, Maryland 20877-0611
Information:	Jeff Horlick - KZ3F (301)258-0112; Steve Todd - K2IYQ (301)253-4172
Training:	Ken Nichols - KD3VK (301)977-5405; Dick Hayman - K3DML (301)251-8721

Congratulations to the Montgomery Amateur Radio Club for its recent 2-part Club meeting on the theory and implementation of low-cost wire antenna design! For openers, Dick-K3DML gave an extraordinary presentation entitled "Cheap Antennas for Cheap People." This intriguing title caused the meeting room to be filled to the rafters—with approximately 60 M.A.R.C. members and guests in attendance...Dick's presentation was supplemented by formal documentation, replete with "how to" illustrations for both the beginner or advanced antenna experimenter. The Club wishes to express its appreciation to Dick for a "job well done..."

Following up on K3DML's smashing talk and demonstration, M.A.R.C. held its first ever "Build Your Own Antenna" night. At the end of this remarkably successful event and under the watchful eye of several M.A.R.C. members, approximately 15 individuals in the Club walked away with "ready to install" HF and 2-Meter Quad antennas! As for your M.A.R.C. *AUTO-CALL* Scribe, the Amateur Reporter wishes to file a report of a successful "baptism by solder!" Seriously, the Club wishes to thank Steve-K2IYQ for enthusiastically coordinating this event and for "coaxing" Joel of the R.F. Connection to share his "coax" goodies (get it?) with M.A.R.C.! Additional support was provided by Al-NW2M, Glenn-N3COB, Jeff-KZ3F, Rick-K3YNY, and Jim (N3KTV), who are hereby recognized for their outstanding contributions....

Becoming an Amateur Radio Operator starts with that all important documentation from the FCC. Along these lines, the Club wishes to thank Pierre-KB3ZM for heading up the last round of VEC exams, co-sponsored by the Washington Adventist Amateur Radio Club, the Rock Creek Amateur Radio Club, and M.A.R.C. Five candidates were tested and five candidates walked away clutching that vital certificate indicating successful licensing or upgrading! (2 Technician; 1 General; and 2 Extra) KB3ZM's team of crack volunteers (including Steve-K2IYQ, Walt - KX3U, Alison-N3EWE, Dick-K3DML, Bill-K3MHZ, Bob-NK3I, John-WB3GXW, and Henry-W3BWN) is hereby recognized for the team's proven history of "due diligence" and its 100% "pass record." Hip, hip, hooray....

This brings up an important point: it is Volunteer Examiners such as the above-named crew who are first and foremost responsible for the following list of First and Second Readings at a recent M.A.R.C. meeting: FIRST READINGS: Robert E. LeBlanc-WI3F, Edward V. Nowicki-N3GJX, David Gilbert-N3LRS. SECOND READINGS: Kelsey Kemp-KA8INK, William Wright-WI3M, Mark Pressman-N4DR, Charles Visconage-W3TLD, William Spillane-KA3QPS

"Returning" members of M.A.R.C. include: Susan Smith - WB3DPN, Sterling "Rip" Smith - KC3H, Glenn Simons (N3COB). In addition, Louis Martin who joined M.A.R.C. as an Associate is now N3LPQ...Congratulations and welcome one and all to the Montgomery Amateur Radio Club!

Your Amateur Reporter wishes to thank Jeff-KZ3F for compiling the above information, as well as for his excellent work on the M.A.R.C. Directory—which was recently published and distributed for 1992. To provide an indication of how fast the Club is expanding, the Club Directory, printed in March contains 259 members. As of the date of this column, M.A.R.C. membership was approaching 275 and Still Growing...(no complaints from this corner....)

M.A.R.C. has officially kicked off the Public Service Season with its annual support of Fritzbe's Famous 10K Run. See this column next month; else STAY TUNED to .955.

Erinn-N3HSA

Prince George's Wireless Assn.

Meetings: First Working Tuesday of each month, 7:30 p.m., American
Red Cross Service Building, 6206 Belcrest Road, Hyattsville, MD 20782
Club Station: K3CEZ
Mailing: 4109 Kennedy Street, Hyattsville, MD 20781
Information: Frank Holton, WA3ZMW (301) 927-1245

Prince George's Wireless Assn. is looking toward a banner year in 1992 for the club and its members. Hersh (Dan) Miller - W3SWD, the club secretary; and Frank Holton - WA3ZMW, club president, are presently outlining the Emergency Communications Call-up sheet and priority list. This list will include, in availability order, the members of the club who can be in readiness for any type of disaster or emergency communication task associated with the American Red Cross service work.

Club members will help with 2-meter communications for an annual activity named "Crop Walk." This is a Church group of volunteers walking a 10-K planned route to help fund church and missionary work. Sponsors offer to pay so much a mile walked for a worthy cause. Our members will be stationed in strategic areas along the route to help in case of emergencies. This takes place the first week-end in May here in the Hyattsville, Maryland area.

We are looking forward to Field Day exercises this year. The portable generators have been overhauled and the club is ready to operate the HF gear solely on portable power.

Two new members have joined PGWA and we would like to welcome them to the group. Conrad Lee - N3LHE and John Shaw - N3LYD have just recently received their new licenses and are eager in working with us.

Hersh (Dan) Miller - W3SWD has just spent two weeks in Florida visiting with a brother who is also in to Amateur Radio. We are looking forward to seeing Dan at our next meeting to render an exciting account of his trip.

Our planned radio oriented learning and on-hand operational program is getting under way. Question and answer participation of circuitry and operating procedures will be conducted along with blackboard illustrations.

Ken Easton - N3HLY

"Have You Earned Your Tomorrow?"

Is anybody happier because you passed their way?
Does anyone remember that you spoke to them today?
The day is almost over, and its toiling time is through;
Is there anyone to utter now a kindly word to you?
And can you say this evening, with the day that's slipping fast,
That you helped a single brother of the many that you passed?
Is a single heart rejoicing over what you did or said?
Does the one whose hopes were fading, now with courage look ahead?
Did you waste the day, or use it? Was it well or sorely spent?
Did you leave a trail of kindness or a scar of discontent?
As you close your eyes in slumber, do you think that God will say,
"You have earned one more tomorrow by the work you did today."

- John Hall

From Manor Care Newsletter

Herndon Repeater Group

Meetings: On-the-air meetings every Monday at 9:00 p.m.
Repeater: N4FXP/R 144.71/145.31 MHz
Packet BBS: 145.09 MHz
Mailing: Herndon Repeater Group, P.O. Box 5073, Herndon, VA 22070
Training: Michael Weber - WB8RDN (703) 450-2304
Information: Michael Rosati - N4FXP (703) 481-8380

EXAMS: See the Volunteer Exam Cooperative listing in this issue of *Auto-Call* for information on the May 9 ARRL VEC session at the Herndon High School cafeteria. All applicants should arrive by 8:45 a.m. Contact Mike-WB8RDN or Terry-AB4UM for additional details.

FIELD DAY: Plan to join HRG for the annual Field Day activities on June 27 - 28 from the "Group Campground" area of Lake Fairfax Park in Reston. Operators will be needed (especially after dark) so plan to attend now. Members, non-members and the general public are invited and encouraged to participate. For more details, contact Bill-N4WJN or check into/monitor the HRG Monday evening net.

Equipment Loaner Program: HRG has started an Equipment Loaner Program which will allow new Amateurs who are HRG members to borrow various items of club equipment, such as radios, antennas and power supplies. The maximum loan period is for two months. That should allow the new ham time to obtain permanent equipment. So far, HRG has one 2-meter rig, one power supply and two magnetic mount 2-meter mobile antennas in the program. Donations or loans of any working equipment will be appreciated. For additional information on this program, contact the Loaner Program manager, Chris-WA1ZXX at (703) 430-2877.

General Class Course: The Herndon Repeater Group's General Class course (code and theory) began March 28 and will run until May 2. The course is being held at the Fairfax Church of Christ, near Fair Oaks Hospital, and has 24 students enrolled, many of whom will take the General exam on 9 May (See Exams on page 23). The course instructors are Terry-AB4UM (code) and Jerry-AC4JV (theory).

Picnic/Technical Forum: HRG held a picnic at Lake Fairfax Park in Reston on Sunday, April 5. In addition to the usual picnic festivities, HRG sponsored a technical assistance forum during the picnic and made available sophisticated technical equipment to check the functioning of radio equipment and antennas, such as SWR & power meters, deviation, and frequency, as well as more detailed measurements. Equipment and assistance was on hand to assist anyone with minor repairs. This was an excellent opportunity for new hams to learn how their equipment is working and to obtain assistance in correcting any radio equipment and antennas concerned. In addition, there were packet radio and HF mobile demonstrations. The event was a huge success, largely due to the efforts of Tom-WB8ZRP and Jack-N4ULS, the event organizers.

Club Net: The HRG Net meets every Monday evening at 9 p.m. on the 145.31 MHz N4FXP/R machine in Herndon. At the request of the HRG membership, the Net now meets weekly.

Packet: Information on the HRG BBS packet (145.09 MHz) system can be obtained from SYSOP Bill-N4WJN or Don-KD4CHU on the HRG Repeater or connect to N4WJN on the BBSHRG. New HRG members now on packet include Ann-KD4GSS, Mike-WB8RDN, Tom-WB8ZRP, Lee Ann-KD4GSR and Barbara-KA8FUI.

New FAR Reps: HRG has selected Jack Anderson-N4ULS and Don Smith-KD4CHU as the new HRG trustees to the Foundation For Amateur Radio.

Flea Market: HRG plans to have a flea market booth at the Manassas Hamfest. Look for the red and white HRG banner and stop by.

Mike - WB8RDN

"Ole Virginia Hams" Amateur Radio Club

Meetings: Third Monday of each month, 8:00 p.m.
Northern Virginia Coop Building
10323 Lomond Drive, Manassas, Virginia

Repeaters: Voice: WA4FPM 146.97 and 224.66
Digipeater WA4FPM-1 145.09
Digipeater WA4FPM-3 223.40

Net: Each Thursday, 8:00 p.m., 146.97 and 224.66

Information: Harry Vorhauer - W4PVA 703-368-6050
Steve Frick - N4OGR 703-361-0008 or Metro 690-6547

Mail Address: Ole Virginia Hams ARC, PO Box 1255, Manassas, VA 22110

This is my last chance to remind everyone that the **Manassas Hamfest** will be held on Sunday, June 7 at the Prince William Fairgrounds, one-half mile south of Manassas on Route 234. There will be hourly prizes and parking is free. The gates will open to the public at 8:00 AM (7:00 AM for tailgating). Talk-in will be available on 146.37/97 and 223.06/66.

Those interested are also reminded that **VE exams** will be held on the following Saturday, June 13, in Manassas. The two events can't be held on the same day since most of the Volunteer Examiners will be busy helping with the hamfest.

OVH's No-code Technician class currently has fourteen students. They are scheduled to finish the course on June 1. The classes are being held at Stonewall Senior High School, Manassas, VA. For information, contact John Fritsch - N4YOB (703) 791-5995.

The new OVH officers are as follows:

President: John Fritsch - N4YOB
Vice-pres: Jim McKinley - WD4OJY
Secretary: Jeff Barr - KB4IWD
Treasurer: Butch Tonolet - N6NSM

Congratulations to all!

Mike - N4REI

Voice Recognition Call Processing

Voice Recognition technology being developed by the American Telephone and Telegraph Company (AT & T) could replace up to one-third of its 18,000 long-distance operators by 1994, according to a report appearing in the New York Times. AT & T says it has developed the new technology because more customers now direct-dial their long distance calls, eliminating the need for an operator.

Using innovative software, the new technology will reduce the need for human operators even further by allowing computers to recognize a customer's response to a series of computerized questions. A new algorithm, or sophisticated recipe of instructions, called word spotting, involves millions of calculations. It allows a caller to pause, stammer or even speak ungrammatical sentences without confusing the computer. A customer experiencing difficulty with a call can still ask for a human operator instead of the computer.

Voice Recognition, under development at AT & T since 1985, eventually would handle many calls now assisted by human operators, including collect calls and those billed to third parties, like office and residential numbers. It is expected to eliminate anywhere from 3,000 to 6,000 operator jobs nationwide between now and 1994.

Submitted by Jim Hursz - AB4YP

Metropolitan Communications Network

Representing Six Meters in the Greater National Capital Area

Meetings: Quarterly, on the second Sunday of the month.
Time and place to be announced.
Repeater: N3AGB/R, 52.250 MHz in; 53.250 MHz out.
Accessible on 147.36 MHz and 444.35.
On-the-air: Saturdays at 1900 hours
Mailing: Bob Sporn - WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903
Information: Bob Sporn - WA3GGO (301) 434-1719

The latest of our new check-ins is Patrick Crosby - KA4FHK. Joe Saunders - K3UAL worked two stations in Cuba and one in Haiti on 10-meters, having 75 stations towards his DXCC on 10-meters. Stanley Brigham - W3TFA participated February 8 and 9 in the QCWA QSO Party for CW, falling 7 contacts short of an award. Robert Curry - KC3VO has been invited to participate in a DXpedition in the Ukraine in the Commonwealth of Independent States, from April 24 to May 5 (all expenses paid). He can be monitored on 28.885 MHz on upper sideband. The DXpedition will start from near Chernobyl.

THE SUNDAY MORNING COFFEE NET (50.4) MHz R 0900 Hours. Participation has doubled in the past few weeks. Did we mention that Bob Curry - KC3VO had a color video QSO with the Space Shuttle? Bob's participation in the Chernobyl Area DXpedition will start the same day that the Dayton Hamvention starts.

MARYLAND FREE STATE SIX METER SIDEBAND NET (50.125 MHz) Sundays at 1900 Hours Recently we have had check-ins from several neighboring states. The June meeting will be held at Chris Kushay's QTH, time to be announced.

Bob - WA3GGO

Atomic Clock IC?

"How small can we make an atomic clock?" asked KE4ZV (April Auto-Call, page 40).

Harvey C. Nathanson, Chief Scientist of the Electronics, Information and Science Division of the Westinghouse Science and Technology Center in Pittsburgh, offered his view in the January 1992 issue of IEEE Spectrum (p. 43): "Research has started on gaseous ICs in which a dime-sized cylindrical glass cell containing a vapor of a transition metal such as cesium is pumped by a semiconductor laser to produce a population inversion. Meanwhile, a microwave circuit 'tickles' the gas, depopulating it when the microwave frequency is precisely matched to the resonant frequency of the gas atoms. This depopulation occurs at 9.1 GHz - accurate to 11 decimal places. Researchers plan to develop the...device into a low-cost atomic clock for service in stealth aircraft programs and 'friendly' fire avoidance systems, for example."

These applications allude to the possibility of using very low power to send data at a very slow rate over a very narrow-band channel which contains very little noise. Coherent CW (CCW), described in the ARRL Handbook, is a prime example. The narrower the bandwidth, the less noise will be received. However, the phase noise of a crystal-controlled oscillator spreads the energy of its signal over a bandwidth equal to about one millionth of the oscillator frequency, so there is no advantage to using a narrower bandwidth to receive its signal.

An atomic-clock (oscillator) IC stable to 1 part in 100 billion ("accurate to 11 decimal places") would allow the bandwidth to be 100,000 smaller. This would allow 100,000 times less power to be used than would be needed for a signal generated by a crystal-controlled oscillator.

Mike - NW3V

Green Mountain Repeater Association, Inc.

Meetings: Board of Directors / Control Operators, Last Monday each month.
Luncheon: First Saturday each month at Fountain Care, Laurel Shopping Center Mall,
Baltimore Avenue, U.S. Rt 1 and Cherry Lane.
Repeaters: KD3VR - 146.61 and K3GXF - 146.88
Mailing: GMRA, P.O. Box 429, Riverdale, Maryland 20737
Information: Boyd Nelson - KZ3Z (301) 434-0934

The Green Mountain Repeater Association, Inc., is a non-profit organization composed of 128 licensed Radio Amateurs. Its' officers and directors are not paid for their efforts. All monies collected are used solely for obligations incurred by the Association directly in connection with the maintenance of the repeaters and related business affairs.

The 146.61 repeater has autopatch dialing capabilities for its members and is located near Greenbelt, Maryland and the Baltimore-Washington Parkway. The 146.88 repeater is located in Cheverly, Maryland near the Prince George's General Hospital. Both repeaters are commercial class Motorola, rack mounted with 120 watts output.

Most of us that use the repeaters don't realize the efforts of those control operators and technicians that maintain the units for our benefit. The controller fund still needs \$500 to pay off the loan debt of the units. So far, one third of the membership has donated to the fund. Each year the Directors and maintenance operator dig into their own coffers to pay for parts and components.

GMRA welcomes new members at all times. The dues are \$15 per year and include all privileges, including operating booklet, roster sheet and autopatch capabilities and information. Donations to the repeater fund will be gratefully appreciated.

GMRA Board of Directors / Control Operators

President:	Joe Nunemaker - KD3VR	(301) 577-3749
1st V.P. :	Paul J. Frierich - W3HFA *	(301) 593-7205
2nd V.P. :	Carey David - N3GYB	(301) 474-5933
Secretary:	C.T. David - K3GFX	(301) 577-5796
Treasurer:	Boyd Nelson - KZ3Z	(301) 434-0934

* Note: W3HFA has been appointed to finish the term held by John Teer - K5VCG who retired and moved.

Ken Easton - N3HLY

Kent Island Hamfest

May 2

The Kent Island Amateur Radio Club Hamfest will be held May 1 at the Gransonville VFW. Doors open at 0730 Admission \$4, YLs and Harmonics free. No extra charge for tailgating. Indoor tables available - first come basis. Information: K3ORC, WN3G, K3UBC, K3ZSB.
P.O. Box 921, Stevensville, MD 21666
Talk-in 145.35 Repeater, 146.52 Simplex

Vienna Wireless Society

25 Years of Public Service

Meetings: 2nd and 4th Fridays of each month, 7:30 PM
Vienna Community Center, 120 Cherry Street, Vienna, VA

Repeaters: K4HTA/R 146.085 in/146.685 out, 222.340 in/223.940 out,
448.250 in/443.250 out, 443.375 in/448.375 out

Nets: Vienna Emergency Net every Thursday at 7:30 p.m. 146.085 / 146.685.
Pow Wow Net every night except meetings at 9:00 PM on 28.400
Slow Speed Code every night except meetings at 9:00 p.m. 28.390 MHz

Information: Margy Patterson - N2JRG (703) 620-1727

Training Classes: Paul Wilkins - AB4CY (703) 560-2779

Mailing Address: P.O. Box 418, Vienna, VA 22183

The program for our first meeting in March was given by Dave Borden - K8MMO from AMRAD. He brought pictures and graphs from his homemade seismograph. He explained how it worked and showed us how different motions, such as his wife going down the stairs, made different graphs. He hopes some day to get his seismograph set up in the mountains somewhere to avoid house and street movements and link it by radio back to his house.

On March 21st a number of VWS members set up a station at the Great Falls Technology Day. Jorge Thevenet - KD4DGQ organized the day and Rick Lellinger - N4FBW gave a brief talk. Too bad the weather was cold and windy decreasing the number of spectators and blowing the displays around.

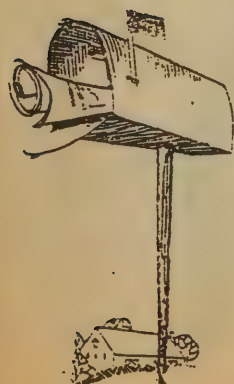
On March 27th we had our annual banquet. Rick Lellinger - N4FBW made the arrangements and provided a wonderful evening. Not only is the banquet the night non-ham spouses get in on some of the fun of

the radio club but it is also the night we give out awards. This year Pat Crosby - KA4FHK received an award for his service as 1991 President, Paul Wilkins - AB4CY was given his award for his longtime service in our training program, and Jim Parsons - WA4LTO was honored for his years editing our newsletter "The VWS Relay".

Our 448.375 repeater link to 2-meters is up and working. We had it linked to Goddard during the space shuttle mission and it worked perfectly. We have also linked it with our 146.685 machine in Vienna. Sometimes it works too well and picks up the Philadelphia machine. With a little time and energy we should be able to fix that soon.

Well, May is here and the weather is warming up. Now it's time to finish up working on antennas and other outside work before the trees make it too difficult. Spring time and the ham's heart turns to Field Day!

Margy - N2JRG



Address Changes

If you are moving, or if your mailing address is being changed even for a brief vacation period, please let us know well in advance. Third class mail is not forwarded by the post office, so if you are one of the Snow Birds who go south for the winter and north for the summer, be sure to keep us advised. We'll be glad to make the temporary change. We want you to get your Auto-Call but we can't afford to replace rejected mailings.

Please keep Auto-Call advised of address changes.

Sterling Park Amateur Radio Club

Meetings: Third Monday of the month except December, July and August
At Sterling Community Center Annex, Church Road (Rt. 625)
near Route 28, Sterling, Virginia

Mailing: Box 599, Sterling, VA 22170

Information: Dick Maylott, W4LMJ (703) 430-3842 or
Joe D'Angelo, WB2SAI (703) 444-1252

Sterling Park ARC has been getting more than its fair share of national publicity lately.

First, as always, we sponsored the Virginia State QSO Party over the weekend of March 21-23. If my humble personal observances are any indication, it was one of the most successful QSO parties in years. Activity seemed good, particularly on 40 meters, both phone and CW. Lots of our own club members were on, so I doubt that many logs will not have a contact from Loudoun County. As usual, only time will tell, when the logs come rolling in. If you were on, and haven't sent your log yet, send it to Forrest-N4UTY right now if you want to be included in the results.

Second, our latest claim to fame is that Sterling Park is handling the QSL chores for the SAREX (Shuttle Amateur Radio Experiment) aboard the Atlantis Space Shuttle (Mission STS-45), which flew the last of March and early April. Nets and bulletin boards throughout the country have been distributing information related to obtaining QSL's for either two-way contacts with the shuttle, or for hearing it on a pass during which the two meter station was in operation. As operators of the two-letter 4-land DX QSL bureau, it seemed that we were in a good position to help out AMSAT in this endeavor. Four of the seven astronauts are licensed Amateur operators, so activity should be quite high. We'll be getting together with NASA representatives after the landing to obtain materials to verify the cards.

Our new novice/technician class got underway on March 2, under the leadership of Mark Johnson - WS3N. He's getting a lot of help from KN4VI, KD4GSQ, AC4AP, and others. The sessions are going great, with a lot of enthusiasm among the 15 participants. They're keeping it low key, as there is a wide range of ages among the participants. So far, the attrition rate has been nil.

Our March meeting featured Gene Harrison - WB4NGC, and his bag of goodies - a suitcase full of emergency communication hardware. It's amazing how much versatility can be found in a few HT's, some wire, various portable antennas, and the like. In fact, he even demonstrated how to set up a portable HT repeater. Again, as in a number of recent meetings, the 10:00 curfew at the "annex" cut short an interesting meeting, and so a number of us didn't get much opportunity to enjoy Mrs. D'Angelo's cheesecake!

Our April meeting is scheduled to be a SKYWARN meeting/discussion. We plan to hold it at SKYWARN headquarters in Sterling, rather than our usual meeting place. This will allow for a tour and demonstration of their facilities, which should be interesting. By the time this gets to print, we'll already be thinking about Field Day, so get in touch with Bill - KC4ATU, if you would like to help out.

Dick - W4LMJ



Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

Meetings:	4th Wednesday of each month (except November & December) 8:00 p.m. at Harrison-Beard Building on corner of 9th and Montgomery, Laurel, Maryland.
Social:	2nd Wednesday of each month except December. (Call for directions.)
Nets:	1st & 3rd & 5th Wednesday of each month, 8:30 p.m. on 147.54 simplex.
Mail:	P.O. Box 3039, Laurel, MD 20709-0039
Exams:	3rd Saturday of each month, 10:00 a.m. at Maryland Radio Center.
Information:	Jim - WI3N (301) 725-6829 or Pud - W3DQI at (301) 498-6293

The Laurel Amateur Radio Club is active in the Laurel area, which we think generally includes most of Northern PG County, as well as the surrounding area in Howard, Montgomery, and Anne Arundel Counties. All Amateurs in "our neighborhood" are welcome to participate in LARC activities.

The Laurel Amateur Radio Club officially began its public service year by helping the D.C. Roadrunners with their annual President's Day Marathon, held on the Beltsville Agricultural Center grounds. Fifteen club members turned out to provide net control and spotters around the course. Special thanks to Dave-W3HCK for chairing the event, and Curt-AL7LQ for providing a net control station that could be heard over the entire course. We will be participating in at least three more public service events before Field Day.

Speaking of Field Day, the City of Laurel Cable TV crew came by and filmed last Field Day. There were shots of the set-up, operating, and interviews with our president Bill-KD3EC and other participants. The half hour tape ran for several months on the local access channel in Laurel. It was nicely edited and has been an excellent promotion for Amateur Radio.

During our January meeting, one of our members, George-WD3W, gave a talk on ham radio in Germany as it is affected by unification. George has a regular sked with a ham there and he and XYL Donna-N3HYF have visited with him several times. Our February meeting had Ken-K3ZHD from C/P Telephone Company give a show and tell on fiber optics. We got to compare the few fibers with the four inch thick twisted pair cable they replace. He even brought a short video tape showing the manufacturing process for fibers.

We were pleased to have as our speaker for the March meeting Chris Imlay-N3AKD, General Counsel to the ARRL. Chris brought us up to date on WARC-92 and spent some time talking about restrictive antenna covenants. Thanks to John-WB3GXW for arranging for him to come.

We tried something different for this meeting. Prior to the meeting we obtained the FCC list of 217 mailing labels from the ARRL in the four zip codes considered the Laurel area. After combining families and deleting club members who would be notified of the meeting by the *Feedback* (our club newsletter) we sent 166 post cards to the remainder, inviting them to the meeting. This generated one new person and we've had 25 undeliverable cards returned. It cost us about \$50 to do it. I don't consider it a waste since there are now about 141 ham households who know about the LARC. We put the meeting and frequency info on the card. It will be interesting to see if the mailing generates any interest in the future.

The LARC VE team at MRC continues to test large numbers of folks. The March test session saw 75 persons taking about 135 elements. It's a lot of work for a few dedicated volunteers to administer the exams, grade the papers, register people and see that the 610s are in order, and finally to send the paperwork to the FCC. Thanks for your dedication and efficiency.

Jim - WI3N

The three-day weekend was created because it's impossible to cram all the bad weather into two days.

Lighten Up Enterprises

Anne Arundel Radio Club

Meetings: First and Third Thursdays at 8:00 p.m.
Davidsonville Family Recreation Center, Queen Anne Bridge &
Wayson Roads off Md. Rt 214 near Annapolis

On-the-Air Thursdays when there is no club meeting, 2030 Local on 147.705/105
Tuesdays at 2030 Local time on 28.410
Maryland Slow Net (MSN) every evening at 1930 on 3.7170 MHz
Chesapeake Weather & Traffic Net every weekend and public holiday,
at 1100 and 1500 local, from April 1 to November 15 on 147.705/105

Address: P.O. Box 308, Davidsonville, MD 21035

Information: Margaret (Holly) Bevan, (301) 923-0229

At the March 19 Club meeting, Michael Katzmann - NV3Z discussed and demonstrated SPICE, a method of computer modeling which enables one to explore and modify a circuit without lifting a soldering iron. This circuit simulator was developed in the seventies for mainframe computers, but is now available for the PC. It can be used to test a circuit in various ways to determine whether or not it will work before actually building it.

The site of the April meeting was at the satellite dish and in the office of Bob Bruninga - WB4APR at the Naval Academy. Bob discussed the role of the Naval Academy ARC in the recent STS-45 SAREX mission, the Amateur Satellite Program and an HF Packet program he has developed for communications with the Academy's vessels. The May meeting will be held at the Air Force's HF transmitting site in Davidsonville.

On March 8th, fifteen Club members reported to the Severna Park High School at 7:15 a.m. to furnish communications for the first annual Annapolis Striders

Marathon. Most of the 26-mile course was run over the Baltimore & Annapolis Hike and Bike Trail and was a track-certified event.

At the AARC clubhouse on March 14, Oscar Ramsey - NV3G, Bob Israel - WC3I, and Charlie Tiemeyer - W3RMD administered 67 exams to 28 persons. Forty-seven exams were passed. There were 17 upgrades. Dean Alley - NS3V was the coordinator, James Neiswonger - WB8DWD and John Kohl - KO4A graded. They were assisted by Bill Cox - KZ3B, Bettye Tiemeyer - K3VRZ and Holly Bevan - N3BMB. The next testing date at ARRC will be Saturday May 9th.

Walter G. Starnes - N3GOE of Greenbelt became a Silent Key on March 25th. We extend our sincere sympathy to his widow, Helen, and to the rest of his family.

Glenn Depp - N3KTQ has upgraded to Tech with code. Jim Hudson (formerly KA3ZEA) now answers to N3LXI.

Holly - N3BMB

Foundation Meetings

The Foundation for Amateur Radio, Inc. meets at 8:00 p.m. on the second Wednesday of each month.

Visitors are always welcome

Phone (301) 725-5822 for information

The next meeting will be on May 13 in Takoma Park, Maryland
Columbia Union College Science Building Auditorium, Flower Avenue
Talk-in on 147.18

Take Colesville Road off the Beltway (Exit 23 S)
East on Franklin Avenue to Flower Ave., South on Flower Ave.

Maryland Mobileers

Meetings: First Friday of each month at 7:30 p.m.
Anne Arundel County Emergency Operations Center, Crownsville, MD

On-the-Air Every Monday night at 8:30 p.m. on 146.205/805

Address: P.O. Box 935, Severna Park, Md 21144

Information: Bill Howard - WB3V (401) 551-6775

The hamfest at Timonium showed that the club has some dedicated "hungry hams." Over 20 members met for breakfast at 6:00 a.m. before going to the hamfest on March 28.

At the March Mobileers meeting, John Kohl - K04A presented a "First Contact" certificate to Bruce Colburn - KA3ZUG. John used the occasion to stress the importance of recognition for new hams and also elmers. The ARRL has blank certificates for first contacts and elmers. John, who teaches our Novice/Tech class, is justifiably proud of one of his students. Ann - John's XYL - passed her Tech license test and is waiting for her first call. The word is that she did it to better keep track of the OM.

The club is busy with Field Day plans. We are changing from QRP operation to the 150 watt class, and in addition to the traditional SSB and CW stations this year, we expect to have packet, satellite, and ATV stations.

We have formed a new committee to serve new members. With a rapidly expanding membership base, it is easy to overlook new members. The new "Welcoming Committee" will take new members under its wing, provide them with appropriate club information, such as by-laws, name tags, newsletters, etc., and assign an "elmer" if the new member so desires.

The Mobileers activities for the remainder of the year are as follows:

May	Presentation on packet
Jun	Presentation on Field Day
Jul	Mini-hamfest / swap session
Aug	Tech night
Sep	Presentation on QRP
Oct	Club elections
Nov	Space shuttle communications
Dec	Holiday party

Jim - N3EI

License Problems

The Amateur Radio licenses that have been issued in the past year have developed a problem; if you carry them around, the printing can smudge beyond legibility. Notice the warning printed on the margin of the license and take heed. Have the small license laminated or get a photo copy to carry around with you. The copy will serve as a legal document for mobile operation while the original is safely tucked away at home.

Last year the FCC began issuing an entirely new license form. The new form is actually two licenses of equal authority, beautifully laser-printed on the same 8½x 11 inch paper - one designed for framing, the other obviously meant for folding to carry in pocket or purse. The problem is that the laser printing involved is subject to smudging if it is not adequately protected from abrasion and moisture. VE's in the examination room are encountering original licenses that are smudged beyond legibility. Remember, that license has to last ten years now.

(Info from Western Carolina ARS via WorldRadio 4/92)

Maryland Emergency Phone Net

Meetings: Every night, 3920 kHz, 1800 local time (All are welcome)
Net Manager: George Korper - WD3W
Secretary: Jim Mc Coy - N3EI
Treasurer: Rino Masso - KC3ZJ
Directors: KD3JK, WA3YLO, K3ONU, W3DQI (Alternate)

The Maryland Emergency Phone Net (MEPN) is a club, a member of the National Traffic System (NTS), and meets every night on 3920 kHz at 1800L for the purposes of training operators in net procedures and traffic handling; to handle traffic for Maryland and the District of Columbia; and to establish communication links in these areas so that, in the event of an emergency requiring Amateur Radio communication assistance, the MEPN will be prepared to exercise these links until the emergency subsides.

All Radio Amateurs are invited to participate in the Maryland Emergency Phone Net. Those wishing to join the club and receive the monthly bulletin and rollcall sheet should contact either WD3W or N3EI. Yearly dues are \$7.00. There are currently 45 members.

First of all, congratulations are in order to Bob-K3ONU, who was elected director for a full term. Bob has been the senior director, filling the term of Walt Carr-W3LDD who became a Silent Key late last year. Also thanks to George-WD3W who is staying on for another stint as net communications manager.

The hamfest at Timonium was also a great turnout for the MEPN, as we had a membership meeting with about fourteen regular members. The discussion of the new net emergency operating plan was led by Al-W3YVQ. The multi-layered plan has a contingency for every conceivable scenario, and will be presented to the full membership for adoption at the picnic in July. It is currently being studied and fine-tuned by the directors and other section and NTS operators who would also be involved if emergency operating plans were activated.

The MEPN picnic will be hosted again by Tony-WA3YLO at the Anne Arundel ARC facility at the Davidsonville Family Recreation Center (the same spot we used last year). Mark July 12 on your calendar NOW and plan to attend. It is a good place to meet your fellow MEPN and MDD operators, and we will be discussing, for adoption, the EOP as discussed above. Also, if we're lucky, we may be able to get Tony to give us a tour of the very fine AARC clubhouse and grounds.

Finally, George-WD3W will be putting new and more efficient reporting procedures in place starting in April. Basically, most of the work has been shifted from the net control operators to the individual stations, who are encouraged to report to George their net activity during the preceding net month. George will then incorporate these statistics in the monthly MEPN newsletter, and hopefully get it to me in time for publication in Auto-Call.

See you ON THE AIR.

Pud - W3DQI

Widow's Assistance Program

The Foundation's Widow's Assistance Program has been in operation for many years and has accomplished a great deal for the families of our Silent Keys. The program offers to help widows (and other family members) evaluate and dispose of radio equipment in an Amateur's estate. Listings of Estate Sales are carried in the Shack Sales of Auto-Call magazine free of charge, and major items are offered for sale at local hamfests. No fee or commission is charged the families.

Interested parties should contact a local Foundation member club
or call the Widow's Assistance Program at (301) 262-1917.

Shenandoah Valley Amateur Radio Club

Meetings: First and third Fridays of each month at 7:30 p.m.
The SVARC clubhouse at 2921 Grace Street in Winchester, VA.
Repeater: 146.22 in 146.82 out
Net: Shenandoah Valley Emergency Net, 7:15 p.m. daily, Winchester Repeater
Mailing Address: P.O. Box 139, Winchester, VA 22601
Information: Sean McClanahan - WD4RPV (703) 869-4374

With spring here, it's time to think of field day, hamfests, picnics, and all the nice things we do. Guy - W4PSJ, our president, is busy planning for Field Day with some new ideas. There are several public service events we will support with communications. They are:

Apr 25	Doo Dah Parade
May 10	Spring Fever Bialathon
Aug 1	Winchester Junior Trialathon
Aug 2	Winchester Trialathon

The new club officers are doing a good job, just as we expected. The meeting of March 20 was devoted to showing the ARRL tape "Hams In Space." It was a good 30 minute program.

Don't try and smoke the cigars that Shawn - WD4RPV is passing out to celebrate the birth of a new daughter, Jennifer. They do not burn very well!

Amateur Radio suffered a great loss when Lloyd Penrose - NC8G became a Silent Key last month. Pen, as he was known to us, will be missed. I worked with Pen on many public service event. I enjoyed his fellowship in our local chapter of QCWA. Pen loved Amateur Radio. If our supreme being has Amateur Radio, Pen will be a part of it.

Walt - WA4HVU

The Foundation For Amateur Radio, Inc. TM
Announces

The 35th Annual

F.A.R.FEST TM
1992



SUNDAY, SEPTEMBER 13, 1992

**Montgomery County Agricultural Center (Fairgrounds)
Gaithersburg, Maryland**

Northern Virginia FM Association, Inc.

Meetings: 3 times per year (fall, spring, winter)
Weekly Nets: NVFMA Net: Every Wed., 8:00 PM local, 146.79
ARES/Public Service Net, Every Sun., 9:00 p.m. local, 146.91
On Air Equipment Clinic, Every Other Wed., 7:30 PM local, 146.79
Repeaters: 2-Meter: 146.79- (W4LBL-FFX City) & 146.91- (W4XG-Tysons Corner)
440 Mhz: 444.75+ (K4JYF-Tysons Corner)
220 Mhz: 224.50- (WB4YHD-FFX City & X-linked to 146.79)
224.34- (KB4CVL-Tysons Corner)
Membership Info: Norm Rosenthal - KB4VLP, (703) 425-7108 or
Margaret Lindsley - KB4IKU, (703) 818-8182
Mailing Address: NVFMA, P.O. BOX 486, McLean VA 22101

The Northern Virginia FM Assn, Inc. is a Virginia non-profit organization. The organization was formed in 1971 to build and maintain wide area coverage Amateur Radio repeaters as well as to promote Amateur Radio through weekly on the air equipment clinics, bulletins and nets. The repeaters are often used for public service events because of their wide coverage, and QCWA Chapter #91 conducts a net on this repeater every Sunday at 9:00 a.m.. SKYWARN severe weather activations are announced on 146.91. Informational meetings are held in the spring and in the fall and a membership election meeting is held in January. The association has almost 600 members. The repeaters have autopatch (available to members) and the 2-meter repeaters have remote receivers at various locations to extend their effective coverage. The autopatch has approximately 30 speed dial numbers to local police and fire departments for emergency use. The K6LEW 1292.1 Mhz output/1272.1 Mhz input repeater at Tysons Corner is expected to be on the air in the near future.

New members are welcome! Dues are \$12/yr (check to NVFMA). First time members pay a total of \$22 which includes a \$10 one-time initiation fee. Additional family members living at the same address each pay \$6/yr annual dues (plus \$10 first time initiation fee).

Dan - KC4OCG

Southern Maryland Amateur Radio Club

Meetings: 2nd Friday of each month at 7:30 p.m.
Church of the Nativity, 5203 Manchester Dr., Temple Hills, Maryland.
Nets: Tuesdays at 8:00 p.m. on 147.75/15 Repeater
Thursdays at 8:00 p.m. on 28.447 USB
Packet: WA3TAI full service PBBS in Ackokeek, MD
145.03 & 446.075,
SMD (WA3TAI-5) NET/ROM Node in Ackokeek, MD 145.03
Repeater: W3PT/R 147.75/15, Cheltenham, MD. Autopatch to 911
Mailing: P.O. Box 273, Cheltenham, MD 20623
Information: Vic & Linda Curtis, WA3YUV & KA3VNI (301) 888-1388

Southern Maryland ARC training classes started April 6 and once again promised to be a great success. VE testing will be held on May 1 and June 22. (See exam schedule on page 23.)

Congratulations to Richard Eshelman - WK3I on winning first place in the low power division of the December 1991 ARRL 160-meter CW contest. The results have just been announced.

SHACK SALES

Noncommercial advertising of Amateur associated equipment is available to subscribers of AUTO-CALL at a rate of 3¢ per word -- with a \$1 minimum. Commercial vendors and non-subscriber rate is 17¢ per word - with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate.

Estate sales for Widows Assistance handled by a FAR club will be published without cost.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Since no effort is made to investigate advertisers, no warranty can be implied.

Copy must be received by the 5th of the month preceding publication.

WIDOW'S ASSISTANCE

Estate of Elton Davis - W4KP

FOR SALE: Ten-Tec HF Transceiver, Model 540, with frequency readout and Power Supply Model 262-G \$300
Drake Antenna Coupler, Model MN-2000 \$250
Heath HF Transceiver, Model SB-104 with speaker and accessories \$350
Heath HF Linear Amp. Model SB-200 .. \$325
Heath HF Linear Amp. Model SB-220 .. \$450
Heath External VFO SB-644 u/w SB-104 \$150
Heath FET Transistor Testor, IT-3120 .. \$25
Heath Capacitor Testor, Model IT-11 ... \$25
Heath Power Supply Model HP-1144 ... \$25
Heath SWR Meter Model HM-15 - two @ \$15
RF Switch Box - 5 position \$5
Citizen Band Transceivers, Inc. P.S \$5
Much More. For information call Mrs. Elton Davis at (703) 356-7215 or John Swafford - W4HU at (703) 536-9537 (FAR)
(05)

JOB OPENINGS: Successful medium size company in sales and service of electronic point-of-sale terminals and computer systems has a variety of positions open at new location in Laurel, Md. See ad on page 31 and send resume to Hayman Business Systems, 4406 Georgia Avenue, NW, Washington, DC 20011 FAX 202-723-7760 (05)

Need antenna or tower work done?
Call L. Chertok - W3GRF.
(301) 297-4888

WASHINGTON, D.C. AREA HAMS PARADISE.

3 or 4 bedroom, living room, 2 full baths, kitchen, built-in book cases, wood stove plus gas heat. Full basement with finished radio room, office, storage room, shop area and laundry area. Underground utilities, 10 acres - no TV!! Extra large, two car detached garage with RC openers. The K4RZ fire lookout tower at 1800 feet. Walk up the steps - no climbing. Will support about anything you can dream up! 1 hour 15 minutes to D.C., 1 hour to Tysons, 45 minutes to Dulles, 5 minutes to Mt. Weather. Available at \$225,000. Call or write Frank Hoose - K4RZ, 1309 Greensprings Road, New Berne, N.C. 28560. (919) 637-7329 or phone agent Marge Burton at Chase Realty (703) 847-9111. (07)

HAM RADIO HEAVEN \$349,500

High Ridge Top Home with 360° panoramic views. No antenna restrictions. 5½ acres assures privacy. Located 2 miles south of Leesburg, Virginia near Mount Gilead. California Contemporary with majestic direct views of Tysons, Dulles Airport, Rockville, DC, Frederick County and more. Easy access to Dulles or Toll Road. Heated indoor pool. Ideal for an Amateur Radio operator, Astronomy Buff, or bird watcher. Owners willing to consider other properties as partial trade. Call WB4JCY (703) 771-1222 (05)

NORM'S ROTOR SERVICE

Rebuilt Rotors, Parts & Service
Call Norm Jeweler - K3LYW
5263 Agro Drive
Frederick, MD 21701
(301) 874-5885

G AND G ELECTRONICS
OF MARYLAND

8524 DAKOTA DRIVE, GAITHERSBURG, MD.

20877

THE BIRD MAN
OF
WASHINGTON

BIRD 43 WATTMETERS · THE INDUSTRY STANDARD · NEW AND USED

Wattmeter Elements · New and Used

Cases and other BIRD Accessories

... WE BUY OR TRADE USED BIRD ...

SPECIAL PURCHASE:
USED
DUMMY LOADS

0-500 Watts, Oil Filled

New retail \$400 to \$650

DC to 1000 MHz

WHILE THEY LAST

\$150_{EA}

Other power levels available also.

OPEN MONDAY & TUESDAY 11 AM - 9 PM
WEDNESDAY 11 AM - 5 PM & BY APPOINTMENT
301-258-7373

SHACK SALES

WORLD RADIO, Amateur Radio's monthly newspaper can be delivered to your doorstep for only \$14 per year (\$15.09 in California, \$24 overseas). Get the latest on how your fellow amateurs use their hobby to help others. Regular features are Contest and Hamfest announcements, Aerials, Amateur Satellites, Continuous Wave, Digital Bus, DX World, Search & Rescue Communications, FCC Highlights, Mobile, New Products, Propagation, QCWA, QRP, Station Appearance, Traffic, VE Exams, 10-10 International News. Send your subscription to **WORLD RADIO**, 520 Calvados Avenue, Sacramento, CA 95815. (Swp)

STOCK QSL CARDS

100 \$14.00 - Shipping FREE

Send SASE for Samples

K3UAL Print, 1520 Jutewood Avenue

Hyattsville, MD 20785

Phone (301) 773-9383 or 773-5074

(102)

WANTED: In any condition:

- ☐ Collins KWS-1 Transmitters
- ☐ Collins KW1 Transmitter
- ☐ Collins 30K Transmitter
- ☐ Collins 51J/75A Series Receivers
- ☐ A cabinet for Collins 32V-2 Transmitter
- ☐ The desk part of the Johnson Desk kilowatt Amplifier.

Howard M. Mills-W3HM Rt #3, Box 712, Harpers Ferry, WV 25425. Call D.C. (202) 647-2428 (Work) or (304-876-6483 (Home after 7:00 p.m.) (05)

WANTED: Quotes on all Collins AM and SSB, Linears, 30S-1 Etc., Etc.

BUYING surplus stocks of vacuum tubes - receiving, transmitting and special purpose types, tube testers, Etc. M. Levy-W5QJT, 539 McCarty, Suite 407, San Antonio, TX 78216 Telephone (512) 366-3289 (06)

SLIDE RULES WANTED

All Types for Museum Display

Bob Hill - NK3W

200 Agnes Lane, Linthicum, MD
(410) 789-4772 Zip 21090-170205

WANTED: HAM EQUIPMENT AND OTHER PROPERTY. The Radio Club of Junior High School 22 NYC, Inc. is a nonprofit organization, granted 501(C)(3) status by the IRS and incorporated with the goal of using the theme of ham radio to further and enhance the education of young people nationwide. Your property donation or financial support would be greatly appreciated and acknowledged with a receipt for your tax deductible contribution. Please look over whatever unwanted equipment you may have and call us. We will pick up or arrange shipping. You will receive the tax deduction, but most important, the privilege of knowing that your gift really made a difference in the education and upbringing of a child. You are invited to check into the WB2JKJ "22 Crew" CLASSROOM NET at 8 a.m. EDT on 7.238 MHz or on 21.395 throughout the day. We hope to meet all of our friends at the Knoxville Hamfest, this year's Tennessee State Convention, June 6 in Knoxville, TN. Write us at: THE RC OF JHS 22 NYC, INC, P.O. Box 1052, New York, NY 10002. 'Round the clock HOTLINES: Voice (516) 674-4072, FAX (516) 674-9600 (05)

FOR SALE: ALPHA no tune 1.5 KW Amplifier, 10 thru 160 meters \$1600
ICOM Model SM-10 compressor / graphic equalizer desk top microphone \$110
DRAKE R-7 Service Manual \$40
Bob-W4JNN, (703) 560-7161, PO Box 166, Annandale, VA 22003 (04)

CONNECTORS

PL259 High grade	59¢
Reducers 175-176	20¢
Right angle "N"	\$1.50
UHF T Connector	\$2.00
N type T Connector	\$1.50
N type crimp	\$1.00

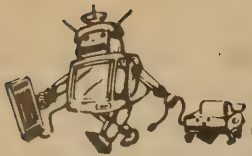
Introductory Special USA

PL259 silver/Teflon - 25 pcs ... \$19.95

SATELLITE HEADQUARTERS

Phone (804) 239-7585
9310 Timberlake Road
Lynchburg, VA 24502

SHACK SALES



COMPUTER CORNER

FOR SALE: Original IBM PC/XT w/10 MB Hard Drive, original IBM EGA Monitor.

Best cash offer over \$200
John Small - KN4LI (703) 759-3838 (05)

FOR SALE: DRAKE L-75 Linear 10 - 160, 1200 PEP \$650
MFJ 3kw Versatuner \$150
New two 3-500Zs @ \$125
Kenwood MC60A mike \$50
Bill Parker - W4YKH (703) 533-0359, Falls Church, VA (05)

FOR SALE: GONSET Linear Amplifier, Model 3262, 1200 watts PEP, in good shape.
Four 811 tubes. Will sell or swap \$200
Bob Slaughter - K4BXZ (703) 281-3305, Vienna, VA (07)

FOR SALE: Hustler HF Mobile antenna package deal. 10-12-15-20-40-75 meter resonators, MO2 break-over mast, QD2 quick disconnect, BM1 bumper mount. All for \$90
MFJ945C 10 to 80 meter mobile ant. tuner \$60
MFJ280 mobile speaker \$10
Tube tester EICO 625, has chart, no manual, one up down knob missing \$15
Greg - KA3DBG (301) 946-6460, Rockville, Maryland (05)

WANTED: Oscilloscope, 10 MHz minimum, dual trace, TV synch, excellent working order.
G. Rose - KB4QGJ (703) 73--1880 (05)

PHD Associates LEESBURG, VA. (703)-777-6949

The QUANTUM HAM BATTERY *H-T Power for Life!*
REALISTIC HTX-202 2M H-T: Loaded with Features!
RANGER COMM. RCI-2950 10M Multimode Mobile Xcvr
"RIG SAVER" Universal Hand-Held/Mobile Radio Mount
VECTRONICS Amplifiers and Tuners...

Call for Prices!

Introducing:

The New HT HOLSTER & The New HT HOLSTER/Q
The HT HOLSTER is a soft protective case for your H-T made of Cordura® and padded pack cloth nylon. Zippered compartments for your H-T, spare battery, "rubber ducky" antenna. The HT HOLSTER I/Q has compartment for your Quantum Ham Battery. Both w/belt loop and optional strap.
Introductory Prices:..... HT-H, \$34.95; HT-H/Q, \$39.95

Call JWO SERVICES

Save on Ameco; ARRL; Callbooks; RSGB; Oscillators; Code Keys; etc.
1992-1993 ARRL REPEATER DIRECTORY
(\$6 List) 1-9 \$5.50; 10-up \$5.15 each
RADIO FREQUENCY INTERFERENCE: How to find it and Fix It (List \$15 1-9 \$13.75; 10-up \$12.85)
Only pay 30¢ handling per order and actual UPS.

We specialize In Large Shipments To Clubs & Classes.

JWO SERVICES

12 Hickory Place Camp Hill, PA 17011
Phone (717) 731-4747 MasterCard / Visa
Daily to 10:00 p.m. and weekend afternoons (05)

FOR SALE: KLM 220 7-Element Yagi with Balun \$45
CB Mobile antenna. New in pkg. \$20
Archer TV Antenna \$10
Measurements Corp. Standard signal generator, 10 to 470 MHz \$125
HEATH IT-27 Transister Tester \$15
Werlatone Broadband Power/VSWR meter. 15 and 50 W scales
27 to 450 MHz \$45
Robot B&W SSTV. Model 80 camera.
70 Monitor, with Cosmocar Camera lense.
Menue Boards, letters, etc. \$225
Hammond Electronic Organ & Bench, Model J100 \$600
Hohner Melocica, with extra mouthpiece, in carrying case. Made in Germany \$50
Larry - W3MSN (301) 894-3977, Oxen Hill, Maryland (05)

FOR SALE: CUSHCRAFT 10-3 10-meter beam antenna, adaptable to 11-meters, assembled, never used \$65
or best offer; WW II memorabilia:
Navy telephones, GSAP aircraft camera, BC 442-A antenna relay unit, Navy deck 24-hour pocket watch (Hamilton, 6 position 22J) etc. G. Rose - KB4QGJ (703) 370-1880 (05)

"RADIO INSTALLATIONS"

Clean - Neat - Professional
If you want it done right

Call us.

Herm - K2LEQ/3
(301) 952-1414
(072)

SHACK SALES

WANTED: Old, odd, unusual bugs (speed keys). Smiley-WB4EDB, PO Box 5150, Fredericksburg, Virginia 22403 Phone (703) 373-0996. (09)

FOR SALE: KENWOOD MC44 hand mike \$10 (not TTP). Greg-KA3DBG (301) 946-6460

WANTED: KENWOOD MC48B mike. MFJ812B VHF SWR wattmeter. Greg-KA3DBG (301) 946-6460, Rockville, MD (05)

FOR SALE: Rohn HBX48 self-supporting 48' tower. Excellent condition \$350

Dave Rogers-N4JGQ (703) 237-5465 or Larry Wilbur-WB4PFJ (703) 691-3249 (05)

WANTED: Rohn 25 tower sections and accessory/rotor shelf. Dave Rogers-N4JGQ (703) 237-5465 (05)

ATTENTION SCANNER OWNERS

The Southern Maryland Frequency List is now available thru mail order.

2500 listings for MD, DC and Metro Area.

\$12.95 from Southern Patuxent ARC

1445 Parran Rd., St. Leonard MD 20685 (05)

FOR SALE: YAESU FT-757 GX-II 100 watt Transceiver, complete with cable, instruction book and microphone. YAESU FP 757 Heavy duty Power Supply, matches transceiver. Value new - \$1400 Sell for \$895

KENWOOD Model TH 21A 144 MHz FM Transceiver. Value new - \$200 \$140

MFJ Model 407 Deluxe Electronic Keyer. Value new - \$139 Sell for \$65

DIAWA CNW 419 Antenna Tuner, 200 watt with cross needle meter. New \$225 ... \$150

Vibroplex Vibro Keyer, Standard (not iambic) Value new - \$60 Sell for \$40

MFJ 901B (VERSA TUNER) Antenna tuner. Value new - \$60 Sell for \$35

KENWOOD AT 250 Automatic Antenna Tuner. (Needs minor work) Value new \$325 .. \$150

MINI BUGCATCHER Mobile Antenna (new) Value new - \$45 Sell for \$25

TEN-TEC Model KR-54 Keyer with paddle \$20

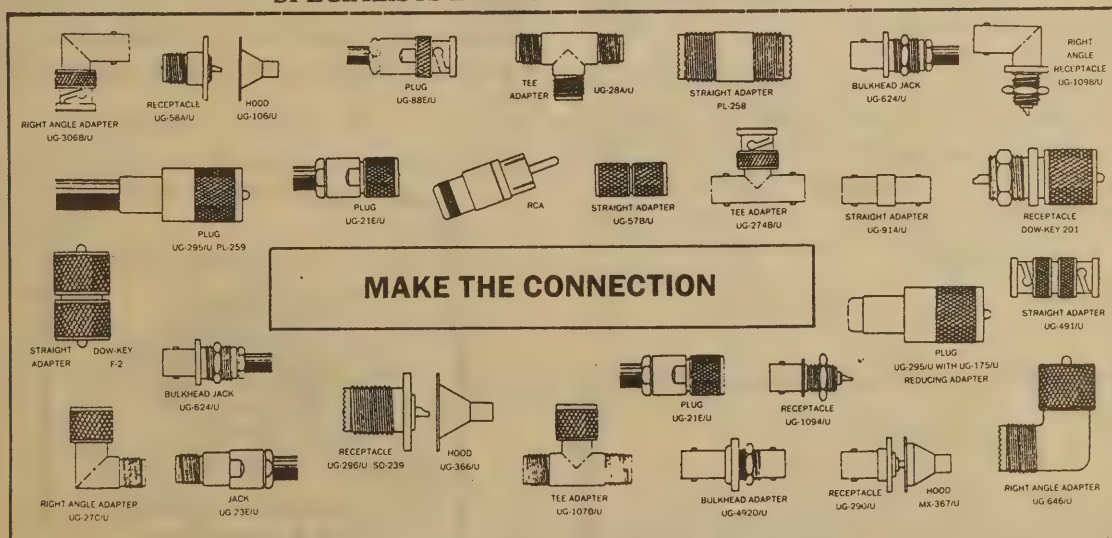
All of the equipment is in excellent condition (except where noted). Carl Gray-W4ACM (703) 360-4373, 1055 Dalebrook Drive, Alexandria, VA 22308 (05)

ADVERTISE IN AUTO-CALL

Our ads get good results.

The R.F. Connection

"SPECIALISTS IN RF CONNECTORS AND COAX"



MAKE THE CONNECTION

The R.F. Connection

213 N. Frederick Ave., Suite 11, Gaithersburg, MD. 20877
301-840-5477

280

SHACK SALES

INSTITUTE OF RADIO COMMUNICATIONS

For high speed CW, theory, Radar and Teletype to prepare the student for any grade of Amateur or commercial FCC license.
Call (301) 568-3185.

FOR SALE: YAESU FT-757GX and matching FC-757AT automatic tuner. Mint condition, with all manuals, packing materials, etc. Used mostly for receiving, low transmitting hours. Asking \$850
John Forrest-WZ4A Call (703) 971-3905 (answering machine), Alexandria, VA (05)

WANTED: Gonset Model 3116B Receiver.
Floyd Martin - W4RW (703) 430-2499 (05)

WANTED: Citizens Radio Callbook Magazine for 1920 thru 1926. Department of Commerce "Radio Stations of the U.S. for 1913, 1914, 1915, and 1916. Department of Commerce "Amateur Radio Stations of the U.S. for 1924, 1925 & 1927. Department of Commerce "Commercial and Government Radio Stations of the U.S. for 1922, 1923, 1926 & 1928. Radio Callbook Magazine (Flying Horse cover) for 1926, 1935 & 1936. Consolidated Radio Callbook Magazine for 1921 thru 1924. Amateur Radio Callbook Magazine by Radio Directory & Publishing Co. 1920 thru 1925. Bob Arrowsmith-W4JJN, P.O. Box 166, Annandale, VA 22003 or call collect (703) 560-7161. (05)

Become a part of one of the country's fastest growing vintage radio clubs. The Mid-Atlantic Antique Radio Club is an active group of radio collectors, restorers and historians. For a sample newsletter, write to Joe Koester at 249 Spring Gap South, Laurel, MD 20707. Phone (301) 725-4229. (Swp)

LOW PRICES
FOR CONNECTORS
UHF - VHF - TNC - N - TV - Satellite.
Catalog \$2 now, \$4 credit with first order.
SATELLITE HEADQUARTERS
9310 Timberlake Road
Lynchburg, VA 24502

WANTED: Old retired Air Traffic Controller wants Gonset Model 3166B Receiver. Manual tuning 108-135 MHz aircraft frequency. Floyd Martin - W4RW (703) 430-2499, Sterling, Virginia (05)

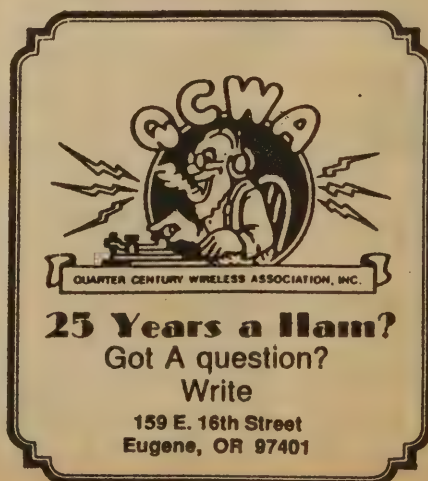
REMEMBER The BRATS

Maryland Hamfest and Computer Fest SUNDAY, July 26, 1992

at the Timonium Fairgrounds, Maryland.
Write to: BRATS, P.O. Box 5915;
Baltimore, Maryland 21208, or call
BRATS HAMFEST LINE: (410) 583-9147.

Are you interested in 6-meter (50-54 MHz) Activities? Join the Metropolitan Communications Network Radio Club, Nets: Saturday 8 p.m. (local time) on the club FM Repeater 53.250 out/52.250 in; Sunday 9 p.m. on 50.400 and 8 p.m. on upper side band 50.125. For more information call Bob Milligan - K14MB at (703) 533-0650 or see the Auto-Call Index for club news column.

Attention Amateur Radio Newsletter Editors. **AMATEUR RADIO NEWS SERVICE** is an organization of publishers and editors of Amateur Radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information, write to Lee Knirko - W9MOL, 833 Park Plaine, Park Ridge, Illinois 60068



Chapter X



Society

of Wireless Pioneers

THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703-536-9537)

**SR
M**

Serio, Romano & Mitchell

CHARTERED
CERTIFIED PUBLIC ACCOUNTANTS

JOHN T. NUTTMANN, CPA

7910 WOODMONT AVENUE
SUITE 1110
BETHESDA MD 20814
(301) 852-5040

Skypoint Ham Center is changing its name & profile!

The new phone number is
703-787-5750

Skypoint Ham Center will be closing up store front operations in Leesburg Va by the end of May. We will be relocating operations in Herndon, Va. The new operations will focus on used Amateur equipment, antennas and accessories, both on a local level and mail order. It has been our pleasure to serve the ham community and we sincerely appreciate the support you have given our store. Necessary changes had to be made and we still look forward to serving you. We are still very much dedicated to customer satisfaction and serving you with your requirements both new and used.

Estate liquidations and widows assistance.

Vintage equipment a specialty.

New equipment sales welcomed.

Dedicated to providing good clean used gear.

Equipment repair & vintage restorations.

Local business by appointment only Mon - Fri
10 - 6 p.m. Other business by mail order.

**Skypoint
Ham
Shack**

Contact #
703-787-5750
Ask for Gil.

Open for calls
7 days a week

AUTO-CALL POLICY

PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is re-typed to preserve uniformity of style in the magazine. We use Word Perfect 5.1 word processing program, Hayes compatible modem (300 or 1200 baud) and can use either 3½" or 5¼" MS-DOS diskettes. We don't do Windows.

In determining space requirements, figure about 600 words per page (50 lines at 12 words per line), including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio. (Copy space is 7" wide by 9" high.) Copy can be reduced or enlarged as necessary.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portion of any copy submitted and to make minor changes to make copy fit available space.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack Sales will **NOT** be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the call sign or the full name of the advertiser. If the full address is not included, we prefer to include the city along with a telephone number so that readers will know whether a long-distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, phone the Auto-Call editor at (703) 536-8469, McLean, VA.

ADVERTISING

SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscriber rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be pre-paid for at least the current month.

Rates per Issue

Page	Col.inch	1 Year	6 Times	3 Times	1 Time
Full	18	\$75.00	\$90.00	\$100.00	\$105.00
1/2	9	55.00	65.00	71.00	75.00
1/3	6	40.00	46.00	51.00	54.00
1/4	4½	33.00	38.00	41.00	43.00
1/6	3	22.00	26.00	28.00	30.00
1/8	2¼	17.00	20.00	22.00	23.00
1/9	2	16.00	19.00	21.00	22.00
1/18	1	8.50	10.00	11.00	11.50

Based on camera-ready copy.

Extra charges for halftoning photos and for in-house artwork or layout.

Copy must be received by the 5th of the month preceding publication date. (e.g., Copy for August issue must be received by 5 July)

All Advertising Must be Pre-paid



JOIN ARRL

BENEFITS FOR YOU

QST, QSL Bureau Awards, Low Cost Insurance Operating Aids,
Government Liaison and More—Much More!

MEMBERSHIP APPLICATION

Name _____ Call _____

Street _____

City _____ Prov./State _____ PC/ZIP _____

\$30 in U.S. \$42 elsewhere (U.S. funds) Licensed amateurs or age 65 or over, upon submitting proof of age, may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 17 and younger may qualify for special rates, write for application.

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA, MC, AMEX, Discover # _____

Signature _____ Expires _____

The American Radio Relay League

225 Main St.

Newington, CT. 06111

USA

AUTOCALL

Atlantic Division Director
Hugh Turnbull, W3ABC
6903 Rhode Island Avenue
College Park, MD 20740
Phone: (301) 927-1797

Roanoke Division Director
John Kanode, N4MM
Rt 1, Box 73-A
Boyce, VA 22620
Phone: 703-837-1340

AUTO-CALL Magazine

P.O. Box 7612

Falls Church, VA 22040-1452

Please enter my NEW _____ RENEWAL _____ GIFT _____ subscription to Auto-Call

For 1 Year _____ 2 Years _____

Subscription rate: \$8.00 per year.

(Sample copy of latest issue \$1.00)

will be applied to subscription

NAME _____ CALL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Make check payable to the Foundation For Amateur Radio

MAY 1992

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Mobileers Shenandoah <u>EXAMS</u> Camp Springs	2 Stafford KENT HAMFEST <u>EXAMS</u> CollegePark Portsmouth
3 PEN-DELL 'FEST	4 Adams County Dept of State	5 Antietam PG Wireless	6 BARC MARC	7 Anne Arundel	8 Alexandria SMARC Vienna	9 Stafford <u>EXAMS</u> Davidsonville Alexandria Herndon Richmond
10 FAR/QCWA BANQUET <u>EXAMS</u>	11 (PVRC)	12 Frederick Fauquier <u>EXAMS</u> Annapolis	13 Pentagon S. Patuxent --- FAR ---	14 AMRAD MADRAS Mt Vernon No. Virginia	15 Rock Creek Shennandoah	16 ROANOKE FEST Capital City Tri County Stafford <u>EXAMS</u> Laurel
17	18 Ole VA Hams Sterling Park	19 Antietam Arlington Woodbridge	20 BARC Goddard MARC QCWA #137 <u>EXAMS</u> HamptonRoads	21 Anne Arundel QCWA #20	22 New Carrollton Vienna	23 Stafford Capital City
24 MARYLAND FM HAMFEST <u>EXAMS</u> Howard County Fairgrounds	25	26 Columbia	27 Laurel QCWA #20	28 MADRAS St. Marys	29	30
31 Adventists	NCDXA Net every Sunday 147.420 at 8:30 p.m.					

Nonprofit Organization
U.S. Postage Paid
Arlington, VA 22210
Permit 757

AUTO-CALL

P.O. Box 7612

Falls Church, VA 22040 - 1452

ADDRESS CORRECTION REQUESTED

92/09 02649
ALFRED A LAUN III K3ZD
PO BOX 31097
TEMPLE HILLS MD 20757